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ABSTRACT

This publication presents an environmental scanning workshop for administrators in higher education institutions to help them incorporate environmental scanning into their planning and anticipation of future events. In particular, the workshop shows how to establish and sustain a comprehensive environmental scanning system and how to use the information the system produces. Environmental scanning is an approach that looks for signals of impending paradigm shifts in current events. An introduction to the workshop describes environmental scanning and the overall approach of the workshop. A schedule for the two-day workshop follows. The main body of the document presents the contents of the workshop which included: (1) how to get started; (2) how to organize and structure the system; (3) how to identify information resources; (4) how to develop a scanning taxonomy; (5) how to use software in maintaining the system; and (6) how to use the products of the system in strategic planning, issues management, and environmental vulnerability audits. Included are illustrations of presentation slides, examples of four environmental scanning newsletters ("On the Horizon," "Lookouts," "Future Concerns of Cardinal Stritch College," and "AERA SIG Futures Research and Strategic Planning Interactive Newsletter"), 3 footnotes and 28 references. (JB)

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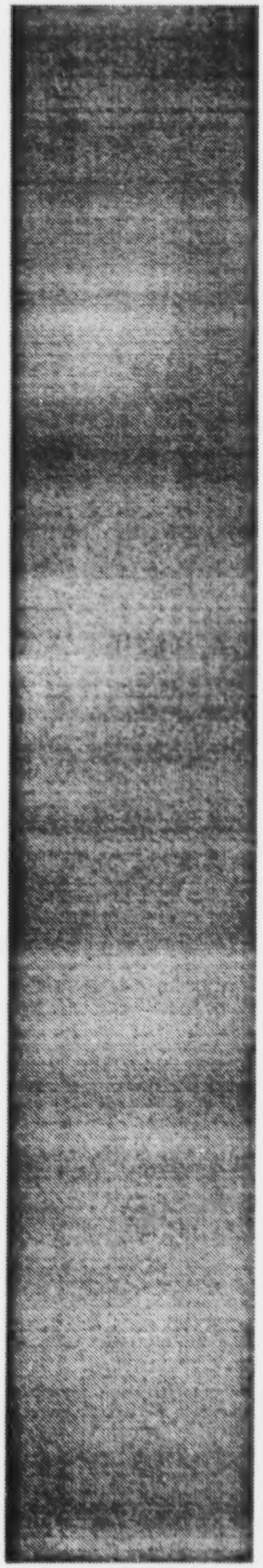

ENVIRONMENTAL SCANNING WORKSHOP

June 10-11, 1992
Holiday Inn
Lansing, Michigan

James L. Morrison
Professor of Education
The University of North Carolina at Chapel Hill

Sponsored by the

ENVIRONMENTAL SCANNING CONSORTIUM *of* MICHIGAN

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ANTICIPATING THE FUTURE
The Role of Environmental Scanning

The last decade, indeed the last year, has been an extraordinarily turbulent time in Western civilization. We have witnessed the end of the cold war and the end of a war in the Gulf. Although the U.S. and coalition forces were victorious in the Gulf war, there is a question whether or not we will "win the peace." We saw an aborted attempt at a military takeover in the Soviet Union; we may see food riots or civil war in that unfortunate region. Europe '92 may incorporate Eastern Europe and become the largest free trade bloc the world has ever seen. In response, a number of nations are projecting joint economic ventures that may include free-trade: the U.S., Canada and Mexico (the North American Free Trade Agreement); Australia and New Zealand; Brazil and Argentina. These blocs may be protectionist, or they may be signals of international free trade. Impossible? Would the dissolution of Communism have been thought possible last year?

We live in a turbulent world

Such events, if they occur, will affect the future of every facet of the United States, including, of course, our institutions of higher education.

Most colleges and universities do not systematically incorporate the effects of potential global events into their strategic or their curricular planning. Most planning models, when and if they do pay attention to the external environment, focus on trends, called "planning assumptions." These assumptions typically focus on demographics, or on legislative trends. The models work well when the external environment is relatively stable and predictable. They do not help when the external world is unstable and unpredictable. They do not require us to search for potential events or for paradigm shifts.

In the language of futurists, the fall of the wall, the unification of Germany, and the breakup of the USSR have resulted in a paradigm shift.

Adam Smith (the pen name of a contemporary Wall Street economist) in *Powers of the Mind*, defined paradigm as "A shared set of assumptions. . . .the way we perceive the world. . . . [it] explains the world to us and helps us to predict its behavior."

We need to anticipate paradigm shifts

Paradigm shifts signify dramatic collective change that upset people's worlds because the assumptions, the rules they lived by, are changed. When paradigm shifts occur, people have to learn new rules even while suffering from the effects of old rules. The build-up of US Forces in Saudi Arabia, for example, was hampered by inadequate sea and air lift capability, a capability not developed sufficiently because the implications of the old paradigm called for prepositioning war materials in Europe as opposed to ferrying them across if "the balloon went up." (Besides, after paying for "star wars" and for airplanes capable of evading sophisticated Soviet radar, there was not that much left over!)

How to anticipate the future

To anticipate the future, we must look for signals of impending paradigm shifts. There were signals that the Berlin wall would come down. It was well-known that the sentiment for unification was strong in both West and East Germany. But the strongest signal occurred in August 1989 when Soviet leadership did not support the East German government in its attempt to stem the flow of its citizens to West Germany through Czechoslovakia. This population surge was like a hole in a dike; the dike fell; the rest is history.

What signals exist that portend an impending paradigm shift in higher education? Consider the following:

- The cost of computer circuit components has been decreasing 25% per year.
- Today's micro-computers are as powerful as 1985 mainframes.
- Satellite teaching is increasingly viewed as a solution to pro ductivity problems.
- The number of institutions requiring entering students (under graduate and graduate) to own microcomputers is increasing.
- In a few years, it will be possible to have a university research library available at home (or in a dorm room) through relatively inexpensive CD ROM technology.
- Economic global competition is increasing along with a corre sponding concern among business leaders that US college graduates are not well prepared.

These signals imply a dramatic shift in the way we will conduct college and university teaching in the next decade. That is, it may well be that some 60 to 80% of instructional delivery will be conducted via computer, interactive multimedia, and satellite technologies. Relatively few of the professoriate, who currently rely on classroom lectures, are prepared to design instruction using these technologies. If indeed the rules for preparing and implementing instruction via these means occur, most of the professoriate will be "back to zero."

There are a number of other paradigms currently dominating American higher education that may be candidates for change. Consider these:

- Faculty members will keep up with the most recent developments in their field.
- American colleges and universities are the best in the world.
- Academic programs should not be held accountable for their graduates' success.

What are the signals that these and other paradigms could change? If they do shift, what are the implications of these shifts for Michigan colleges and universities?

Such questions are important to consider in planning for the future of our institutions of higher education. Perhaps of equal importance, is that we consider how to incorporate a comprehensive environmental scanning system that will provide information and analyses to enhance the success of these institutions as they move forward into a complex, turbulent, and uncertain future.

The environmental scanning workshop focuses on how you can establish and sustain a comprehensive environmental scanning system and how you can use the information obtained in such a system to more effectively anticipate the future. Specifically, this workshop includes

Workshop objectives

- how to get started
- how to organize/structure the system
- how to identify information resources
- how to develop a scanning taxonomy
- how to use software in maintaining the system
- how to use the products of the system in strategic planning, issues management, and environmental vulnerability audits

The program described on the following pages is designed to accomplish these objectives by modeling orientation/analysis sessions you may use on your own campus.

THE PROGRAM

Modeling an orientation workshop that you could conduct on your campus

June 10	
8:30-9:00	Registration
9:00-10:15	Anticipating the Future
	Video, *Discovering the Future: The Business of Paradigms*
10:15-10:30	Break
10:30-11:30	Identifying critical events
11:30-11:45	Prioritizing critical events
11:45-12:00	Writing event statements
12:00-1:00	Lunch
1:00-1:45	Forecasting event probabilities: A Delphi exercise
1:45-2:25	Forecasting event impacts
2:25-2:45	Deriving implications for higher education
2:45-3:00	Break
3:00-3:45	Identifying critical trends
3:45-4:00	Prioritizing trends
4:00-4:15	Writing trend statements
4:15-4:30	Summary
June 11	
8:30-9:00	Continental Breakfast
9:00-10:00	Forecasting trends
10:00-10:30	Deriving implications

	10:30-10:45	Break
How to use scanning information	10:45-12:00	Interrelating trends and events: Cross-impact analysis
	12:00-1:00	Lunch
	1:00-2:00	Using information on critical trends and potential events in strategic planning, issues management, and environmental vulnerability audits
	2:00-2:15	Break
How to establish and maintain the system	2:15-3:30	Establishing and sustaining a comprehensive environmental scanning system in individual institutions • environmental scanning models • how to get started • how to organize and maintain the system to provide early warning • criteria for selecting information sources • how to develop a scanning/monitoring taxonomy • use of electronic data banks
	3:30-3:45	Wrap-up

Establishing an Environmental Scanning System

Rational for environmental scanning

Successful management of colleges and universities depends upon senior leaders' ability to adapt to the rapidly changing external environment. Unfortunately, the lead time once enjoyed by decision-makers to analyze and respond to these and other changes has decreased. Moreover, traditional long-range planning models, with their inward focus and reliance on historical data, do not encourage decision-makers to anticipate external environmental changes and to assess their impact on the organization (Cope, 1981). The underlying assumption of such models is that any future change will be a continuation of the rate and direction of present trends among a limited number of social, technological, economic, and political variables, the interrelationship of which will remain fixed over time. They thus reflect an assumption that the future for the institution will reflect the past and present or, in essence, the future will be "surprise-free." Given our recent experience, however, we know that this is not true, and the further we go out into the future, the less it will be true.

What is needed, as Jonsen (1986) argues, is a method that enables decision-makers to integrate understanding about various sectors of the external environment, especially as they might be interrelated; a capacity to translate this understanding into the institution's planning activity; and a sufficient priority given to the activity to ensure its translation into decisions and implementation.

Definition

A technique has been developed to gather and evaluate information from the external environment—the environmental scanning process. Brown and Weiner (1985) define environmental scanning as "a kind of radar to scan the world systematically and signal the new, the unexpected, the major and the minor" (p. ix). Aguilar (1967) in his field study of information-gathering practices of managers, defined scanning as the *systematic* collection of external information in order to (1) lessen the randomness of information flowing into the organization and (2) provide early warnings for managers of changing external conditions. More specifically, Coates (1985) has identified the objectives of an environmental scanning system as:

- detecting scientific, technical, economic, social, and political interactions and other elements important to the organization
- defining the potential threats, opportunities, or potential changes for the organization implied by those events
- promoting a future orientation in management and staff
- alerting management and staff to trends that are converging, diverging, speeding up, slowing down, or interacting (pp. 2-14)

Fahey & Narayanan (1986) argue that an effective environmental scanning program should enable institutional decision-makers to understand current and potential changes taking place in their institution's external environment. In essence, scanning provides strategic intelligence useful in determining organizational strategies. A consequence of this activity is to foster an understanding of the effects of change on organizations, to aid in forecasting changing conditions, and to bring expectations of change to bear on decision-making (Neufeld, 1985, p. 39).

Literature

Recent literature in educational planning has encouraged college and university decision-makers to use the environmental scanning process as part of their strategic planning model (Callan, 1986; Keller, 1983; Morrison, 1987; and Morrison and Mecca, 1990). Scanning is viewed as a component of external analysis which, when merged with an internal analysis (i.e., review of mission, strengths, weaknesses), assists decision-makers to formulate strategic directions for operational planning (see Figure 1).

Purpose

The purpose of this section is to examine various models of environmental scanning, the extent to which colleges and universities use these models, and how you can establish and use an environmental scanning process on your campus. But first we need to define what we mean by environment and by scanning.

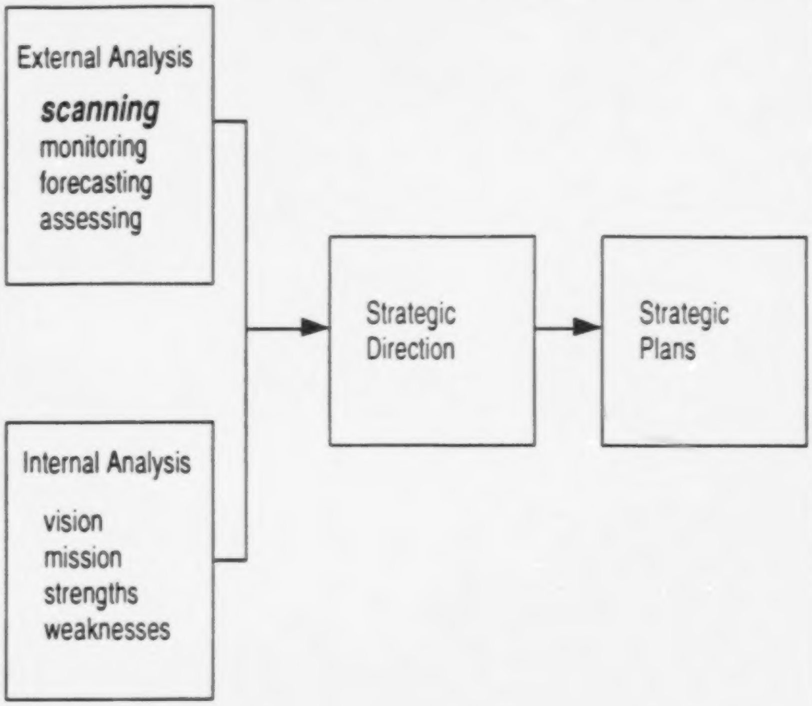
External Analysis
scanning
monitoring
forecasting
assessing
Strategic Direction
Strategic Plans
Internal Analysis
vision
mission
strengths
weaknesses

Figure 1. Role of Scanning in a Strategic Planning Model

Defining the external environment

Fahey & Narayanan (1986) describe several levels of environment. The *task environment* refers to a set of customers (e.g., students and potential students, parents of students and of potential students, political leaders, employers and potential employers of students, professional associations of faculty and administrators). The task environment is more or less specific to a particular institution. Thus, although the task environments of a community college and a research university within 20 miles of each other may overlap, they also differ. The *industry environment* comprises all enterprises associated with higher education in the society. At this level, factors such as the level of public confidence in higher education, or student aid bills being considered by Congress directly affect all institutions, although the effect of these factors varies depending upon the type of institution (i.e., research or comprehensive, two- or four-year). At the broadest level lies the *macroenvironment* where changes in the social, technological, economic, environmental and political sectors affect colleges and universities both directly or indirectly. Thus a national or global recession increases the probability of budget cuts of state governments, and, consequently, budget cuts in publicly supported institutions and, perhaps, state support for independent colleges and universities. At the same time, a recession may stimulate an increase in enrollments, particularly in institutions with low tuitions.

Macroenvironment

STEEP

The macroenvironment includes the social, technological, economic, environmental and political (or STEEP) sectors. The social sector focuses on demographics, life-styles and values. Our interest here lies in understanding shifts in population characteristics and the emergence of new social values or life-styles. The technological sector is concerned with advances in basic research (e.g., new processes, products, or materials) that may generate commercially viable new technologies. The economic sector focuses on the general set of economic factors and conditions in the regional, national and global society (e.g., GNP growth, disparity in income levels, concentrations of wealth). The environmental sector includes the social, technological, economic and political factors in environmental issues (e.g., energy efficiency, reusing and recycling, protecting biological bases, adequately feeding world population, stabilizing population, environmental protection). The political sector focuses on local, regional, national, and global political and regulatory processes (e.g., interest groups, regulatory agencies, legislation). These sectors are interrelated. Changes in one sector at any level (local, national, global) may lead to changes in another. A war in the Middle East may cause the price of oil to increase, thus stimulating a recession, which in turn results in budget cuts. Technological developments in California that enable the conversion of wind power to low cost energy may be introduced world-wide, thereby reducing the costs of fossil fuel energy, with concomitant economic ramifications. Thus developments in the macroenvironment can affect developments in the task and industrial environments. This point underscores the necessity of scanning the macroenvironment as well as the task and industrial environments if we want to pick up the early signals of change that may affect our institutions.

Defining scanning

Types of scanning

Aguilar (1967) identified four modes of collecting scanning information. *Undirected viewing* consists of reading a variety of publications for no specific purpose other to "be informed." *Conditioned viewing* consists of responding to this information in terms of assessing its relevance to the organization. *Informal searching* consists of actively seeking specific information, but doing it in a relatively unstructured way. This is in contrast to *formal searching*, a proactive mode entailing formal methodologies for obtaining information for specific purposes.

Morrison, Renfro, and Boucher (1984) condensed these modes to passive and active scanning. *Passive scanning* is what most of us do when we read journals and newspapers. We tend to read the same kinds of materials—our local newspaper, perhaps a national newspaper like the *New York Times* or *The Wall Street Journal*, and the industry newspaper, *The Chronicle of Higher Education*. We don't tend to read *In These Times* or *Rolling Stone*. The organizational consequences of passive scanning are (1) we do not systematically use the information as intelligence information for the institution and (2) we miss ideas that may signal changes in the macroenvironment that could affect our institution. In order to broaden our perspective and to fight the myopia inherent in us all, we need to use active scanning.

Active scanning focuses attention on information resources that span the broad areas of social, technological, economic, and political sectors—locally, regionally, nationally, and globally. In active scanning, it is important to include information resources that represent different dimensions of the same category (i.e., include *The New Republic* and *The National Review* for the political sector, national level). The list of information resources described later are in a matrix of information resources at the national and international STEEP levels.

Systems of scanning

Fahey, King, and Narayanan (1981) described a typology of systems of scanning used by organizations. *Irregular* systems are used on an ad hoc basis and tend to be crisis initiated. These systems are used when a planning committee needs information for planning assumptions, and conducts a scan for that purpose only. *Periodic* systems are invoked when the director of planning or of institutional research periodically updates that scan, perhaps in preparation for a new planning cycle. *Continuous* systems use the active scanning mode of data collection to systematically inform the strategic planning function in an institution. The rationale undergirding this mode is that potentially relevant "data" are limited only by one's conception of the relevant macroenvironment. These data are inherently scattered, vague, imprecise, and come from a host of varied sources. Since early signals often show up in unexpected places, the scanning purview must be broad and ongoing.

The relationship between scanning and environmental analysis

The terms environmental scanning, environmental analysis, environmental appraisal, and environmental assessment are often used synonymously. Fahey & Narayanan (1986) attempt to clarify this situation by arguing that *scanning* the environment to identify signals of potential environmental change or to detect environmental changes already taking place is only one of four components of environmental analysis. The other components are *monitoring* specific environmental trends and patterns, *forecasting* the future direction of environmental changes, and *assessing* current and future environmental change for organizational implications. The goal of environmental scanning is to alert decision-makers to potentially significant external impingements before they have crystallized so that decision-makers may have as much lead time as possible to consider and to plan for the implications of this change. Consequently, the scope of environmental scanning is broad—they likened scanning to viewing a radar screen with a 360 degree sweep to pick up any signal of change.

The relationship between scanning and monitoring

The interesting future

The terms scanning and monitoring are often used interchangeably, but, as Fahey & Narayanan point out above, monitoring follows scanning. Every possible change or potential shift in the macroenvironment cannot be given equal attention. We select items by defining topics or ideas that are incorporated in "the interesting future"—the period in which major policy options adopted now could probably have significant effect (Renfro & Morrison, 1983, p. 5). We lay aside those trends and events that are important, but not critical *at this time*, and collect data periodically on them. These data are "monitored" so that changes in the status of these trends and potential events can be detected.

Importance of monitoring

Also, the signals of change identified in scanning, if interpreted as having potential impact on the institution, must be monitored. The goal of monitoring is to assemble sufficient data to discern the past and future direction of trends or to enable us to estimate the strength of indicators of potential events. Thus, scanning enables you to identify critical trends and potential events. In monitoring you will use descriptors or indicators of these trends and potential events as key words in your systematic search to obtain information about them.

When you collect data in the monitoring activity, look for information that contains forecasts and perhaps speculation about the implications of the trend or event for institutions of higher education. Monitoring *per se* does not entail forecasting or impact assessments on our own organization. Therefore, in this chapter we will adhere to the convention detailed by Fahey & Narayanan and focus only on types of scanning activity and how you can implement that activity in your institution.

How is environmental scanning being used in colleges and universities today?

A number of colleges and universities have begun to develop methods of formally incorporating environmental scanning information in planning for the future. Friedel & others (1991) conducted a survey of 991 two-year colleges in spring 1991 to identify those institutions that currently conduct environmental scans. Based upon a 60% response rate, they found that 40% of the institutions responding conduct some form of environmental scanning. Of these institutions, 20% use an irregular system, 40% use a periodic system, and 32% use a continuous system. Using any form of scanning is relatively new—half of those using scanning have been doing so for only five years. Some 20% of their respondents stated that they intended to begin a scanning process within the next two years. Meixell (1990) in a survey of 134 public research and doctorate-granting institutions found (based upon a 78% response rate) found that environmental scanning in some form is used in the planning process at half of these institutions.

Research findings

Scanning at a doctoral degree granting urban institution

Pritchett (1990) identified three colleges and universities considered to have institutionalized exemplary scanning programs used to support strategic planning and decision-making and conducted a case study describing each program. Two institutions use an *ad hoc* environmental analysis committee appointed by the president. At one institution, a public, urban, doctoral degree-granting university, the committee is directed by the planning and budget office and consists of experts and community representatives. The scanning cycle is periodic (every two years); the focus is on the task environment. The committee produces a report defining trends, threats and opportunities. This report is used by the planning advisory committee to prepare a five-year strategic direction document in which environmental analysis information is matched with institutional strengths, weaknesses, mission, and state laws. This report is then given to the president who, assisted by the staff, prepares the "University-wide Strategic Directions" report. This report is reviewed by university constituent groups before dissemination to deans and department heads to use in developing unit plans. These plans are reviewed by the president and then linked to the budget.

Scanning in a community college

At the second institution, a two-year college, the scanning committee is coordinated by the vice-president and consists of representatives of the college work force. This college uses an irregular system (i.e., scanning is done on an "as needed" basis). The focus is on the task environment; the product is a chapter in the institution's planning document detailing threats and opportunities. This chapter is used by the planning steering committee in their preparation of a list of five-year institutional goals. Here environmental scanning information is matched with institutional strengths, weaknesses, values, mission and perceived problems. The president submits these goals to the board of regents for approval. After goal approval, institutional task forces are formed to specify objectives to accomplish goals. Deans and department heads formulate unit plans based upon institutional goals and objectives.

Scanning at a comprehensive institution

At the third institution, a comprehensive public institution offering baccalaureate and masters degrees, environmental scanning is the responsibility of the institutional research office. Scanners consist of office staff, who maintain a continuous system scanning the task environment and some elements of the general macroenvironment. The office produces abstracts and a newsletter. These products are distributed to the standing planning council, to the president and executive council, and to all deans and department heads. The planning council is responsible for preparing a three-year report titled, "Institutional Planning Objectives." This report is sent to the president and executive council who match the objectives with scanning information, presidential priorities, the governing board priorities, and proposed new programs/services. This report is then sent to deans and department heads for their use in developing unit plans.

Pritchett also found that there were common patterns in how the environmental scanning activity was developed in these institutions. New presidential leadership and active governing board influence were critical in two institutions; and reductions in state appropriations and enrollment declines were influential for all three institutions. In all institutions, presidential recognition and support for the formal scanning process was seen as an essential element of the planning process. The effectiveness of the scanning process on planning and decision-making was seen as having both limitations and benefits. Some respondents expressed concern about the quality of the data, that environmental domains were defined too narrowly, and that there was limited faculty participation. However, most respondents saw that scanning increased their awareness of external influences, provided more focus on organizational strategies and goals, and provided realistic and "better" data for planning (p. 36).

How can you initiate an environmental scanning program?

Establishing a periodic or irregular system

First, you must decide which level of scanning commitment is best for your institution at this time. Most colleges and universities operate an irregular or periodic system focusing on the task environment. These levels require less resource commitment from the institution, but they only address the immediate needs for information about the external environment. You may satisfy the requirements of these levels through several means. A quick way of getting started is to interview major decision-makers regarding their view of the most critical trends and developments that could affect the institution. Use the interviews and conversations with your colleagues (including those at other institutions) to identify critical trends and potential developments. Also review past program reviews, the last institutional self-study and the most current master plan. The research librarian can assist you search for information on these items.

Establishing a continuous system

Establishing a continuous scanning system will require much more effort and resources. First, you will need to secure a resource commitment from the senior official responsible for planning. At a minimum, this system will require a professional and a support person to devote half of their time to the enterprise. Second, a comprehensive program requires a number of scanners who agree to rigorously and systematically review specific information resources. Assuming that you secure the resources, your next step is to recruit volunteers to perform scanning.

Scanning workshop

One approach that has been successfully used to recruit scanners consists of offering a half- to full-day environmental scanning workshop.[1] Invite faculty members from all disciplines as well as key administrators (or their assistants) from all functional areas. Certainly include members of the planning committee or council, as well as members of the board of trustees and/or board of visitors. Heterogeneity of backgrounds, experience, and perspectives guards against parochial viewpoints and will help us "see" into the future with less hindrance from our own "blinders."

The invitation should convey the idea that environmental scanning information is essential for the institution and for its constituent parts, including program planning within individual departments or functional areas. Also stress that the information obtained in the environmental scanning process will be used to inform the on-going strategic planning process. Therefore, they should keep in mind that they are scanning for information that has implications for the future of the institution and its programs.

Exercises

After explaining how environmental scanning fits into external analysis, and how external analysis is merged with internal analysis to formulate strategic plans, initiate a series of exercises where participants identify and prioritize critical trends and emerging issues. These exercises allow participants to bring their individual knowledge of the external environment to the discussion, thus initiating the development of an event and trend set you can use in monitoring, the second component of external analysis. Moreover, the process of identifying critical trends and potential events should generate enthusiasm among participants to be part of the scanning team.

In a full-day workshop, you can spend time preparing scanners for their task in both scanning and in preparing abstracts. Stress the following points:

Points to stress

- Seek information about signals of change in the STEEP (i.e., social, technological, economic, environmental, political) categories, on the local, regional, national and global level. This requires examining sources for movement in relevant variables (e.g., average SAT score of entering college freshmen, percentage of black males applying for college, etc.) What change is already taking place? Is there a movement upward or downward? What are the projections? What are the incipient or emerging trends (i.e., what combinations of data points—past trends, events, precursors—suggest and support the beginnings or early stages of a possible trend? What external events, policies, or regulatory actions would affect the projections?

- Look for signals of potential events on the horizon. For example, research on Alzheimer's disease may produce a drug with side effects to enhance memory capabilities. New research on solar or wind energy may portend significant savings in energy costs. An increasing number of interactive videodisks and CD Roms may portend a major change in how teaching will be conducted in higher education.

- Look for forecasts of experts. "We are moving toward a sustainable world" (e.g., as argued by Brown, Slavin, and Postel (1991), a world where attention is focused on energy efficiency, reusing and recycling materials, protecting biological and environmental bases, feeding and stabilizing the world population). What are the implications of this for higher education? For our institution?

- It is important to remember that because a particular item does not seem to have direct implications for the institution, does not mean that you should not include it for further analysis. It may affect us through second or third order effects.

- Remember that scanning is an art form; guidelines on how to do it are necessarily few. There are no hard and fast rules to lead to "correct" interpretation of information nor the "correct" interpretation of an issue or change. Keep in mind that your institution has a variety of constituent groups (or stakeholders); try to view information that you receive vis a vis implications from their point of view. The data do not speak by themselves. Your skills, abilities, experience, and judgment are critical in breathing life into the data and in interpreting the data so that they have meaning. View yourself as an artist "to mold and shape material into a coherent whole; to present a vision; to help others imagine and reflect" (Neufeld, 1985, p. 44).

- When preparing abstracts, write the lead sentence in response to this question: "If I had only a few minutes to describe this article to a friend, what would I say? What is the most important idea or event that indicates change?" The response to these questions should be contained in a one-paragraph explanation. Whenever possible, include statistical data. Limit the summary to no more than one-half page of single-spaced, typewritten copy. You may want to include a statement of the implications of the article for the institution, depending upon the institutional culture of your institution. At some institutions, decision-makers wish to see only pertinent articles, not abstracts with implications (Robert Wilkinson, personal communication, February 1992).

Establishing the structure

Scanning committee

The structure of the system does not have to be elaborate. A scanning committee could consist of planning committee members and other interested individuals. The chair is responsible for assigning information sources to each scanner and for collecting and filing copies of articles and scanning abstracts. Periodically, perhaps bimonthly or quarterly, the planning team meets as a scanning evaluation committee to sort, sift, and evaluate the significance of the abstracts. It is reasonable to anticipate from 75-100 abstracts per quarter, depending to some extent on the number of individuals employed in scanning. These meetings will require the team to summarize by sector (i.e., social, technological, economic, and political) all abstracts produced during the quarter. This activity will take one work week by team members. An alternative approach would be for the chair to categorize the abstracts by sector and assign each team member the responsibility for reviewing all abstracts in that sector. Regardless of which approach is used, prepare a written summary (in essence a preliminary analysis) by sector and distribute it prior to the committee meeting. Discussion and analyses at this meeting will take approximately four hours. Each meeting concludes with additions to the trend or event set and perhaps with updated information on trends and events already in the set. The chair should document the discussion and prepare a report for the planning committee or for the chief executive officer.

What information sources are available?

The important criterion for literature selection is diversity. Information should be obtained from newspapers, magazines, dissertations, journals, TV and radio programs, conferences, and from knowledgeable individuals in your personal information network.

There is no lack of information resources available. *Future Survey Annual 1988-89* lists some 454 futures-relevant periodicals. For example, there are 46 publications in international economics and development, 45 in environment/resources/energy, and 31 in health and human services that frequently have futures-relevant information (Marien, 1991, p. 86).

ERIC

In addition, many individuals/organizations put their scan on ERIC. [For examples, see Friedel, 1989 (ED319451 JC900300), Osborn, 1989 (ED307009 JC890256), and Cantonsville (Maryland) Community College, 1989 (ED309817 JC8900388).] There are several scheduled scanning publications of relevance to the macroenvironment of higher education. The Wilkinson Group publishes a monthly scanning newsletter called *What's Happening* (Wilkinson Group, 8128 Pine Lake Court, Alexandria, VA 22309). United Way of America (701 North Fairfax Street, Alexandria, VA 22314) publishes *What Lies Ahead* on a biennial basis. The World Future Society (7910 Woodmont Avenue, Suite 450, Bethesda, MD 20814) publishes *Future Survey*, a monthly abstract of books, articles and reports containing forecasts, trends and ideas about the future. The Global Network publishes the *John Naisbitt's Trend Letter* (1101 30th St., NW, Suite 130 Washington DC 20007). Kiplinger Washington Editors publish the *Kiplinger Washington Letter* (1729 H St., NW, Washington, DC 20006).

Other general interest sources are as follows:

Newspapers

- Newspapers—*The New York Times, The Washington Post, The Wall Street Journal, The Miami Herald, The Chicago Tribune, The Los Angeles Times, The Christian Science Monitor,* and *The Times* [of London].
- Magazines—*Vital Speeches of the Day, Across the Board, Time, Newsweek, U.S. News and World Report, Futures , The Forum for Applied Research and Public Policy*[2] *World Monitor, Atlantic, The Nation, Ms,* and *The Futurist.* [See Marien (in press) for a more a comprehensive list of excellent general interest sources.]

Periodic macroenvironmental literature

There are a number of periodic macroenvironmental scanning information resources soon to be available. The University of North Carolina at Chapel Hill will publish an environmental scanning newsletter for higher education, *On the Horizon,* in conjunction with its Program in Educational Leadership starting Spring 1992 (CB3500 Peabody Hall, Chapel Hill, NC 27599). The *UNESCO Future Scan: A Bibliographic Bulletin of Future-Oriented Literature* (Place de Fontenoy, 75700 Paris, France) has begun semiannual publication. Although the first issue (Jan-June 1992) focuses on the industry environment of global education, future issues will focus on selected sectors of the global macroenvironment.

In order to ensure that we are adequately scanning the macroenvironment, we must identify specific information resources for each STEEP category locally through globally. A comprehensive list of information sources organized by category for the macroenvironment should include the following:

STEEP categories

Social

1. Social/Demographic/Values/Life-Styles Literature—*American Demographics, Public Opinion* and data from periodic publications or statistics from the Census Bureau, other federal, state, and local governmental agencies, and university sociology departments or population study centers. The Department of Labor and the National Technical and Information Services make available specific types of demographic analyses. The National Center for Health Statistics provides data on trends in areas such as fertility and life expectancy. The U.S. League of Savings Associations studies changes in home-buyer demographics, and the American Council of Life Insurance's Social Research Services conducts demographic studies. The UN and OECD publish periodic reports detailing international developments in this area.

Technological

2. Technological Literature—*Technological Review, Datamation, BYTE, Computer World, Discover, InfoWorld, Science, Scientific American, The Whole Earth Review,* and *Proceedings of the National Academy of Sciences.*

Economic

3. Economic Literature—*Business Week, The Economist, Fortune, Forbes, Money, Inc.,* and *The Monthly Labor Review.* You may also obtain data from the Department of Commerce's Bureau of Economic Analysis monthly reports as well as reports from the Departments of

Commerce, Labor, Energy and Treasury. State and local governmental agencies provide regional economic data.

Environmental

4. Environmental Literature—Recommended periodicals are *Ecodecision* (Royal Society of Canada, 276 Rue Saint-Jacque, Oest, Bureau 924, Montreal H24IN3 Canada, and *Environment* (Heldres Publications, 4000 Albermarle St. NW, Wàshington, D.C. 20016). Several organizations publish future-oriented reports on the environment—Global Tomorrow Coalition (1325 G St., NW, Suite 915, Washington, DC 20005-3140), Worldwatch Institute, 1776 Massachusetts Ave., NW, Washington, DC 20036) and Island Press (1718 Connecticut Ave. NW, Washington, DC 20009). The Audubon Society and Sierra Club also publish periodic reports in this area.

Political

5. Political Literature—*New Republic, The National Review, The National Journal, In These Times, Mother Jones, Federal Register, Congressional Quarterly, Weekly Report,* and *Digest of Public General Bills.* Other sources include public opinion leaders, social critics, futures-oriented research establishments (e.g., the Hudson Institute, the Institute for the Future), public policy research centers (e.g., Brookings Institution, the American Enterprise Institute), governmental documents (e.g., public hearings, congressional hearings), proposed bills to the legislature, statements or opinions by social critics, experts, activists. Finally, consult *State Legislatures* (National Conference of State Legislatures, Marketing Department, 1560 Broadway Suite 700, Denver CO 80202) for a periodic summary of pertinent legislation being considered in state legislatures throughout the country.

With respect to systematically scanning the industry environment, key sources include *The Chronicle of Higher Education, Education Week* and *Education Daily.* A number of newsletters serving this area are readily available as well: *Higher Education and National Affairs* (American Council on Education, Publications Division, One DuPont Circle, Washington, D.C. 20036), the SHEEO/*NCES Communications Network News* (suite 32700, 707 17th St., Denver Colorado, 80202-3427), and the American Association of State Colleges and Universities' *Memo to the President* (One DuPont Circle, Washington, D.C. 20036).

Information resources for scanning the task environment include local, state, and regional newspapers, local and state government reports as well as experts in demography, sociology, and political science departments in local colleges and universities.

Networking

Perhaps one of the most useful information resources consists of your own network of friends and colleagues within the institution and in the profession. Frequently you can phone a colleague at another institution and get information quickly. Or you can post your question in the Association for Institutional Research's or the Society for College and University Planning's electronic newsletter. [To receive AIR's electronic newsletter, contact Larry Nelson by e-mail (NELSON_L@PLU.BITNET); for SCUP, contact Joanne Cate by e-mail (BUDLAO@UCCVMA.BITNET) or call 510 987-0963.]

Using electronic data bases

There are a number of electronic data bases that contain up-to-date descriptions of articles (by title and, many times, by abstract) that are available on a subscription bases. ABI Inform, ERIC, and PAIS are a few such data bases. Two data base services, Dialogue and BRS, contain hundreds more data bases specializing in all areas. Undoubtedly, your library already subscribes to these data bases and data base services. These resources are most amenable to monitoring (i.e., to retrieving information about critical trends and potential events that you and the planning team have identified earlier).

In addition, you can use electronic bibliographic data bases to file and store information. Such programs facilitate review, referral and updating. Moreover, through using an electronic filing system, it is easier to develop consortium relationships with similar institutions or with institutions in the same geographic area. There are a number of electronic bibliographic data base software programs available commercially. *Pro-Cite*, a software program developed by Personal Bibliographic Software, has standard workforms for each data entry into variable-length fields and records; authority lists to standardize names, bibliographic titles, or key words; and

Bibliographic data bases

a search capability using Boolean logic for quick retrieval. One reason for using this program is that it is available in both Macintosh and PC/MS DOS formats, thereby allowing data exchange via modem, over a network, or through a mainframe. In addition, Personal Bibliographic Software has developed two complementary programs, *Pro-Search* and *Bibliolinks,* thereby allowing retrieval of information from a major data base like Dialogue, which can be downloaded to disk and transferred into an appropriate *Pro-Cite* workform (journal, book, newspaper article, etc.). It is also possible to use a standard data-base program. For example, the scanning program at the University of Minnesota uses dBase II.

Assigning information resources to scanners

Assigning scanners specific materials for regular review and analysis provides a measure of confidence that most "blips" on the radar screen will be spotted. First, ascertain what materials, conferences, and so forth, are regularly reviewed by the scanners. This list should be compared to the list of important information resources identified above. Certainly you will want to assign scanners material they already regularly review. It is likely that there will be material that is not regularly read; in such cases, ask for volunteers to read those resources. You will need to spot check how well the information resources are being reviewed. If you have an abundance of scanners, build in redundancy by having two or more scanners review the same information resource.

Conducting a scanning committee meeting

Approaches to scanning committee work

A scanning committee meeting should be held every two to three months to handle the articles/abstracts that would probably come in during that period. Several approaches could be used to prepare for a scanning committee meeting. For example, in one approach, the chair segregates abstracts according to subject area (i.e., all those concerning office automation go into one pile, employee compensation go into another, and those difficult to assign, into a miscellaneous pile). Each member of the committee is assigned a particular packet of abstracts to review in detail. All members read the entire selection of abstracts received, but are requested to come to the meeting with a list of only new trends and potential issues derived from those abstracts in their packet. They are expected to examine how these new trends and issues relate to or conflict with other trend areas identified previously.

An alternative approach is for each member to review all scanning abstracts and come to the meeting prepared to sort them into three categories: "winners," "losers," and "middle-of-the-roaders." Irrespective of the approach used, the meeting itself may last from two to four hours, including a round robin, with each person reporting his/her subject area, and a free-for-all discussion. The end result should be a list and brief description of 15 or so trends, possible events, and emerging issues that appear important to consider in the annual planning exercise.

Developing a scanning/monitoring taxonomy

The trends and events identified in the initial planning activity and in the workshop for volunteer scanners may be used to develop the beginnings of a scanning taxonomy, so that every possible item resulting from scanning has a logical place to be classified. A taxonomy has two objectives: (a) to provide a comprehensive set of categories within which related materials can be filed, and (b) to provide a numbering method for every piece of information collected, as well as for the specific trends and events identified (or created) within these categories. The sectors discussed earlier make up an elementary taxonomy—social, technological, economic, environmental and political. This taxonomy can be and usually is subdivided (e.g., education, values, demographics from the social sector). With the use of electronic bibliographic database programs, it may be easier to develop the taxonomy "as you go" using key words as your categories and filing hard copy as indicated by category. Indeed, you will want to tailor your taxonomy to your institution. Be aware that developing, storing and maintaining an environmental scanning database requires a good deal of time and effort. I suggest that you enlist the aid of a reference librarian to assist you in this task.

Objectives of the taxonomy

Publishing a scanning newsletter

A scanning newsletter can serve to bring important new trends and events to the attention of all members of the organization and, at the same time, provide recognition for the efforts of scanners. Certainly the trends and events identified between planning sessions in scanning committee meetings should be included in the newsletter. This newsletter could be a "stand alone" or could be included as an insert in one of the regularly-published organizational newsletters. You may want to consider a logo, present the newsletter on distinctive paper, and have special boxes labeled, "Wild Speculations" or "Left Field," or "Wild Cards." The important point is to avoid anointing speculations, but to recognize that the purpose of the newsletter is to print items that have implications for the organization. Solicit comments and contributions from all who read the newsletter. They are good sources of insight. Make the format easy to read in form and content. A number of institutions regularly publish such newsletters (e.g., *Lookouts* from the University of Georgia's Center for Continuing Education, *Trend Lines* from Western Illinois University, and *Foresight* from Pittsburgh State University[3]). Examples of various types of newsletters are found in the appendices.

Methodological issues in scanning

Any scanning program must deal with a number of methodological issues. As Marien (1991) notes, scanning is an imperfect activity because of the choices we must make vis a vis "what we will and will not look at in our effort to understand the world." (p. 84) These choices are as follows: Will we observe the external environment directly or will we rely on others? Do we scan only recent material, or do we include "backscanning?" Do we include video and other non-print sources? Do we include electronic as well as non-electronic sources? Do we include non-English materials? Do we include science fiction? Do we include books? How do we determine credible sources? Do we ensure that all world views are represented? Do we confine scanning to trends? Or do we include events (what may happen) and policies (what ought to be done, which may also be what may happen). Marien argues that by ignoring the wild and not-so-wild cards that can be only loosely anticipated, "scanners are ignoring a major category of driving forces. And by ignoring preferable futures, scanners consciously or unconsciously take a passive and conservative stance that maintains the status quo by accepting the quiet tyranny of the 'most likely' future or 'base line' scenario" (p. 87). The scanning process should be structured to avoid the possibility of your institution being "blindsided" by a change in the macroenvironment that could have been seen coming.

Remember

We all do passive scanning. However, remember that active scanning is required if we want to enhance the capacity of decision-makers to understand, anticipate, and respond to the threats and opportunities posed by changes in the external environment. Active scanning is a part of any level of scanning—irregular, periodic, or continuous.

Irrespective of which level of a scanning program you implement, it is important that campus decision-makers participate in the process. By doing so, they can develop a shared understanding of high priority issues and a view of the dynamics of the changing environment of the organization. Their participation in the process facilitates team building, focuses their attention upon the longer-term future, and assures that the intelligence developed from the process has authority from top management.

Remember that scanning is only one component of external analysis. However, it is the starting point from which you and your colleagues will identify critical trends and potential events that you will want to monitor and to forecast where they are going and their implications for your institution. Engaging in the complete external analysis process is an enriching professional development experience; more importantly, however, it provides a basis for discerning the strategic direction of your institution from which you may plan far more effectively.

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Footnotes

[1] See Morrison (1985), Morrison and Cope (1985), Mecca and Morrison (1988), and Morrison and Held (1988) for sample descriptions of such workshops.

[2] Write to the editor, 1005 Mississippi Avenue, Davenport, IA 52803 to obtain a subscription.

[3] The editors of these newsletters have agreed to respond to questions you may have if you want to develop a newsletter for your campus. Their names and addresses are as follows: Donna McGinty, Editor, *Lookouts*, Center for Continuing Education, The University of Georgia, Athens, GA 30602; Lowell Lueck, Director of Institutional Research and Planning, Editor, *Trend Lines*, Western Illinois University, 312 Sherman Hall, Macomb, IL 61455; and Robert Wilkinson, Director of Institutional Research and Editor, *Foresight*, 212 Russ Hall, Pittsburg State University, Pittsburg, KA, 66762.

About the Workshop Leader . . .

Academic positions

James L. Morrison received his Ph.D. at the Florida State University in 1969. He was lecturer in sociology at the University of Maryland, European Division and graduate assistant in sociology at the University of Munich (1964-65), instructor in sociology at the Florida State University (1968-69), and assistant professor of education and sociology at the Pennsylvania State University (1969-73). He moved to Chapel Hill as associate professor of education in 1973 and was promoted to full professor in 1977. At UNC he teaches courses in planning, evaluation, and research.

Seminar/workshop experience

He has designed and implemented professional development seminars on planning and forecasting for the UNC-Chapel Hill Continuing Education Center, H + E Associates (Great Britain), and the Fuqua School of Business at Duke University. In addition, he has made over 90 presentations in the last six years for such associations as the World Future Society, the Society for College and University Planning, the American Association for Higher Education, the Association for the Study of Higher Education, the American Educational Research Association, the Association for Community and Junior Colleges, the North Carolina Association for Institutional Research, the Southern Association for Institutional Research, the European Association for Institutional Research, the Association for Institutional Research, the National League for Nursing, and the American Association of School Administrators.

Consulting experience

He has served as a planning consultant to a number of colleges (Caldwell, Hood, Lenoir-Rhyne, Saint Augustine's), universities (Alabama, Arizona State, Clemson, Tennessee, and the Virgin Islands), university systems (Maine), university continuing education centers (Georgia), community college systems (South Carolina), community colleges (Northwestern Michigan College), educational agencies (U.S. Department of Education and the North Carolina Department of Public Instruction), school systems (Orange County [Orlando] Public Schools), educational consortia (Consortium for the Advancement of Public Education) and public agencies (U.S. Department of Labor, Public Pension Guaranty Corporation). In the corporate world, he served as a planning consultant to Ethan Allen, Inc., and currently serves as a faculty member in the executive leadership training program of Caltex Petroleum Corporation. His consulting activities focus on assisting organizations in developing environmental scanning/forecasting systems to augment their strategic long-range planning processes.

He served as vice president (Division J—Postsecondary Education), the American Educational Research Association, and as convener of the

Service activities

Forum on Environmental Scanning, The American Association for Higher Education. He also served two terms as a member of the Board of Directors, Association for the Study of Higher Education; chaired the special interest group on futures research, the American Educational Research Association; chaired the editorial board, The *Review of Higher Education*, and served as consulting editor of *The Review of Educational Research* and *The American Educational Research Journal*. He currently serves on the environmental scanning committee of United Way of America.

Publications

He is author and coauthor of over 50 publications focusing on the application of futures research techniques in planning and policy analysis, including *The Alternative Futures Approach to Long-Range Planning: A Handbook for Army Long-Range Planners* (Department of the Army, 1990), *Applying Methods and Techniques of Futures Research* [with William L. Renfro and Wayne I. Boucher] (Jossey-Bass, 1983), and *Futures Research and the Strategic Planning Process* [with William L. Renfro and Wayne I. Boucher] (Association for the Study of Higher Education, 1984). The latter two publications and two articles, "Establishing an Environmental Scanning Capability to Augment College and University Planning," and "Managing Uncertainty" [with Thomas V. Mecca] have been cited as critical reading in *A Guide to New Planners* (Norris and Poulton, Society for College and University Planning, 1991).

Military experience

He retired from the U.S. Army Reserve (Colonel, USAR, Civil Affairs) in May 1991. From 1986-1991 he served as Deputy Commander, Individual Mobilization Augmentee, U.S. Army Research Institute for the Social and Behavioral Sciences. His assignments included serving as a long-range planning consultant for the Office of the Deputy Chief of Staff for Operations, the Office of the Deputy Chief of Staff for Doctrine, the U.S. Army Reserve Personnel Center and the Office Chief, Army Reserve. In July 1990, President Bush via the Secretary of the Army awarded him the Meritorious Service Medal for training Army long-range planners in the alternative futures approach to planning model and for assisting the Chief, Army Reserve in using this model to develop the 1990-2020 Army Reserve long-range plan. In April 1991, President Bush via the Secretary of the Army awarded him the second highest award authorized for peacetime, the Legion of Merit Medal, for his career contributions to planning for the Total Army.

Presentation Slides

Environmental Scanning

Dr. James L. Morrison

Professor of Education
University of North Carolina at Chapel Hill

The skills a successful leader needs are anticipation skills

Peter Drucker

Objectives

- **How do we anticipate the future?**
- **What tools and techniques are available?**

How do we anticipate the future?

- **Identify potential events**
- **Identify critical trends**
- **Forecast**

Definition of EVENT

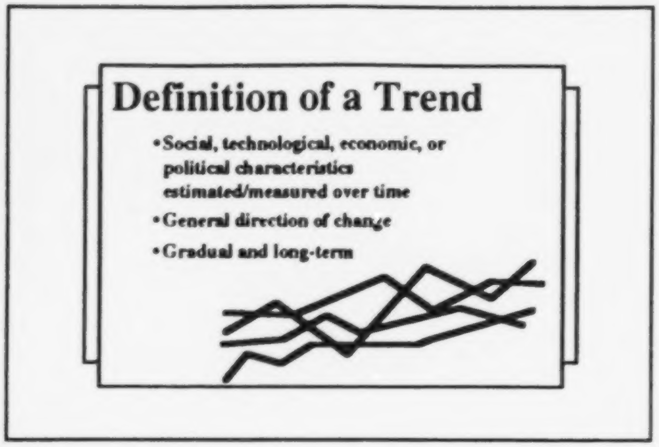
An unambiguous, confirmable occurrence

When an event occurs, our future is different!

Event Examples

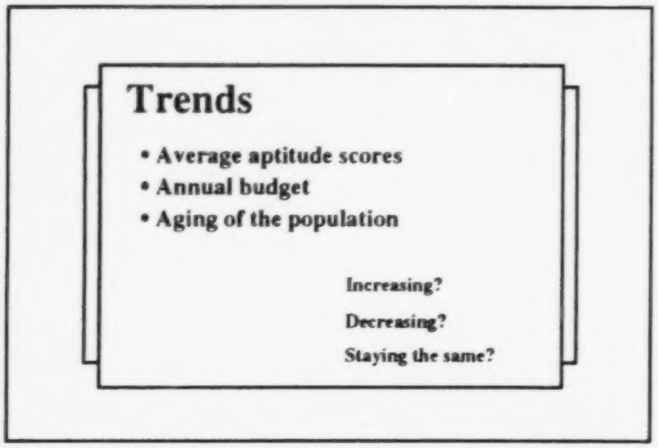
- **Fall of the Berlin Wall**
- **Europe '92 including Eastern European countries**
- **Breakup of the Soviet Union**

Notes



Definition of a Trend

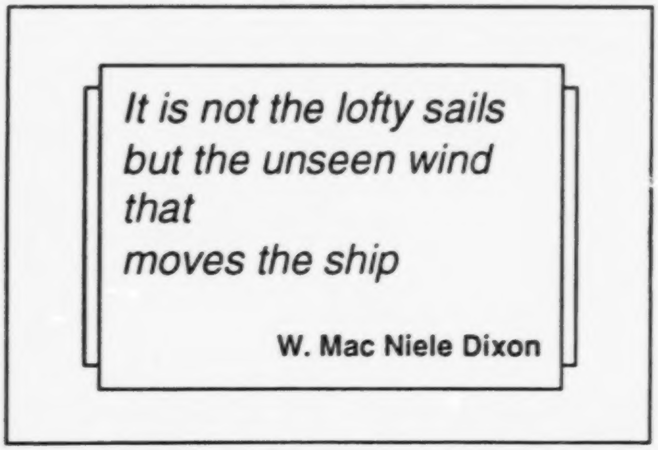
- Social, technological, economic, or political characteristics estimated/measured over time
- General direction of change
- Gradual and long-term



Trends

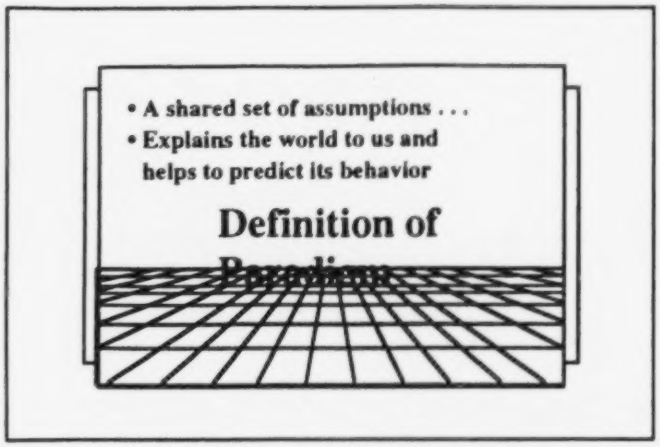
- Average aptitude scores
- Annual budget
- Aging of the population

Increasing?
Decreasing?
Staying the same?



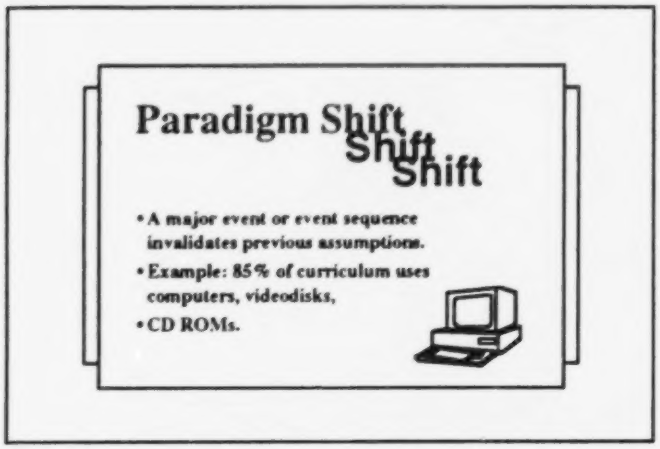
It is not the lofty sails
but the unseen wind
that
moves the ship

W. Mac Niele Dixon



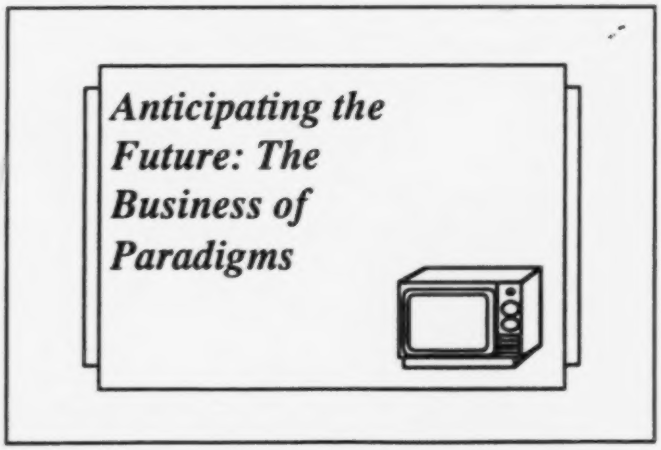
- A shared set of assumptions . . .
- Explains the world to us and helps to predict its behavior

Definition of Paradigm

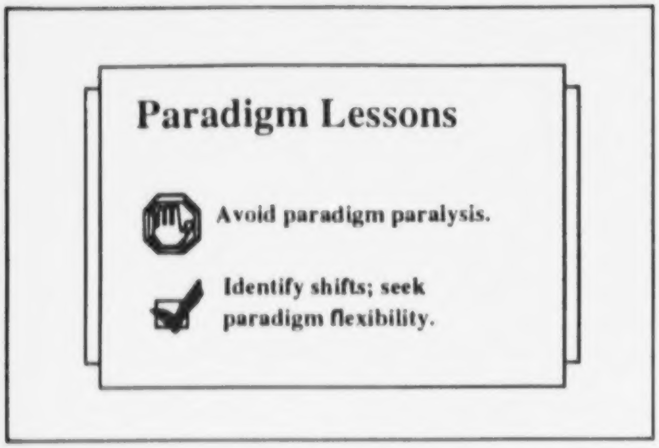


Paradigm Shift Shift Shift

- A major event or event sequence invalidates previous assumptions.
- Example: 85% of curriculum uses computers, videodisks,
- CD ROMs.

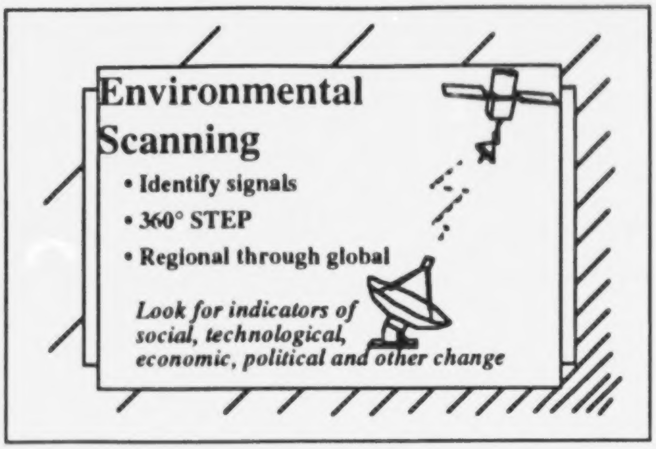


Anticipating the Future: The Business of Paradigms



Paradigm Lessons

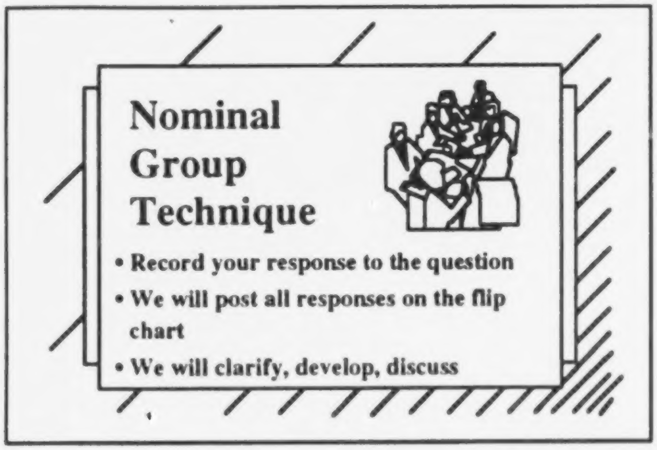
- Avoid paradigm paralysis.
- ✓ Identify shifts; seek paradigm flexibility.



Environmental Scanning

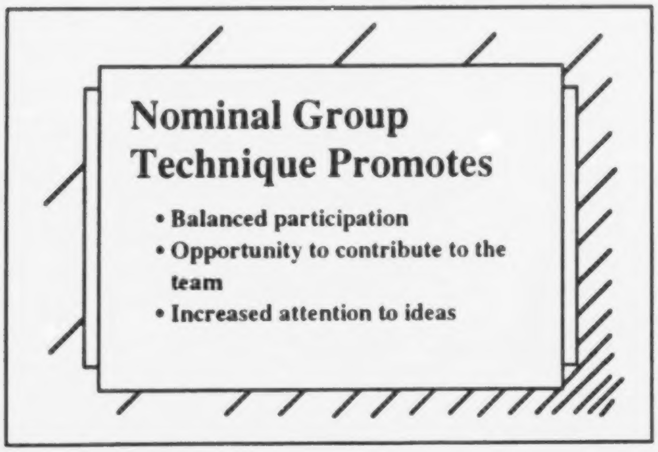
- Identify signals
- 360° STEP
- Regional through global

Look for indicators of social, technological, economic, political and other change



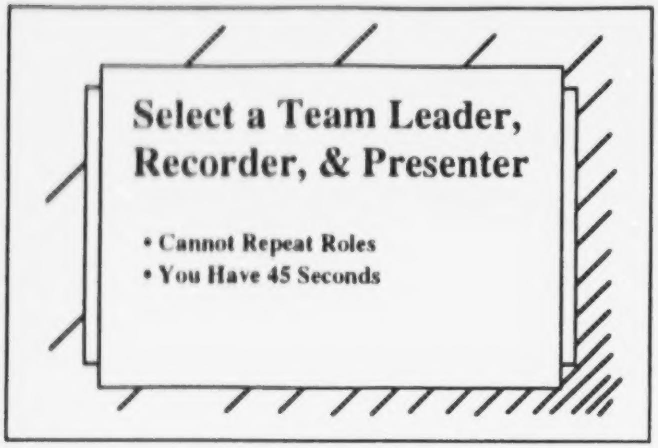
Nominal Group Technique

- Record your response to the question
- We will post all responses on the flip chart
- We will clarify, develop, discuss



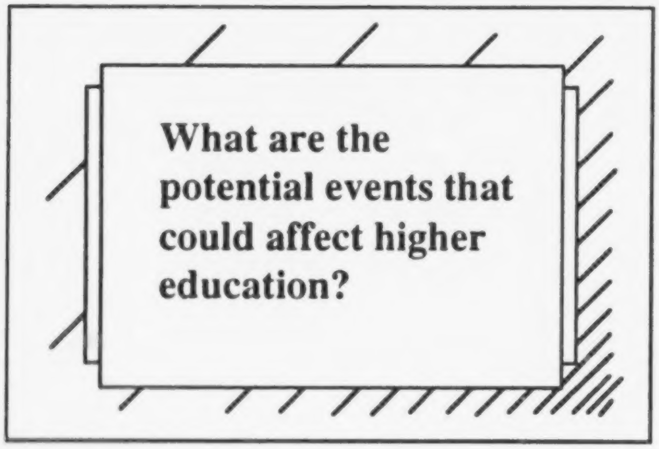
Nominal Group Technique Promotes

- Balanced participation
- Opportunity to contribute to the team
- Increased attention to ideas

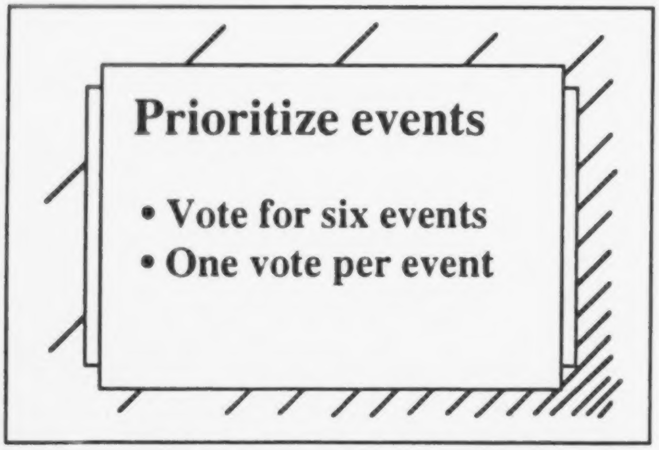


Select a Team Leader, Recorder, & Presenter

- Cannot Repeat Roles
- You Have 45 Seconds



What are the potential events that could affect higher education?



Prioritize events

- Vote for six events
- One vote per event

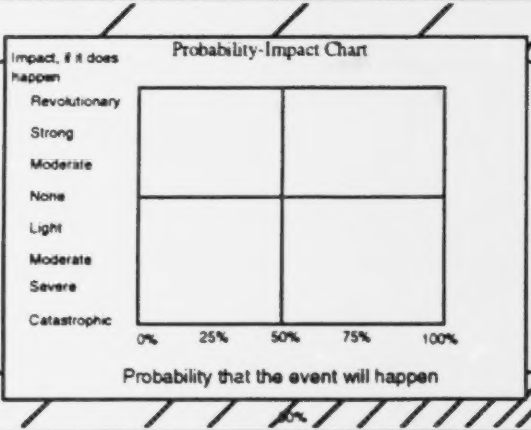
Writing Event Statements

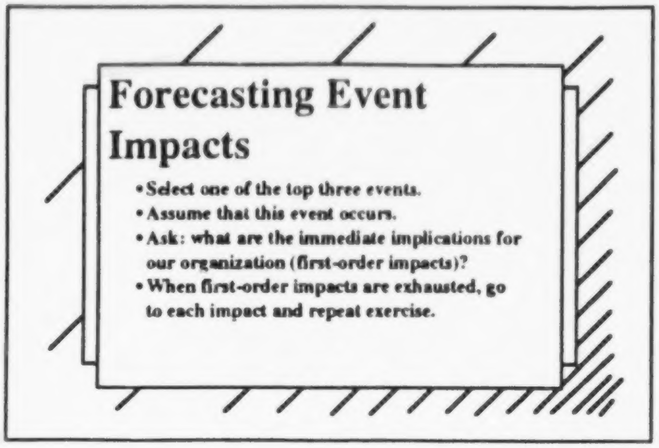
- Single occurrence
- Do not state cause
- Avoid ambiguous terms

Forecasting Event Probabilities

- Select one event
- Estimate its probability and impact within the next ten years

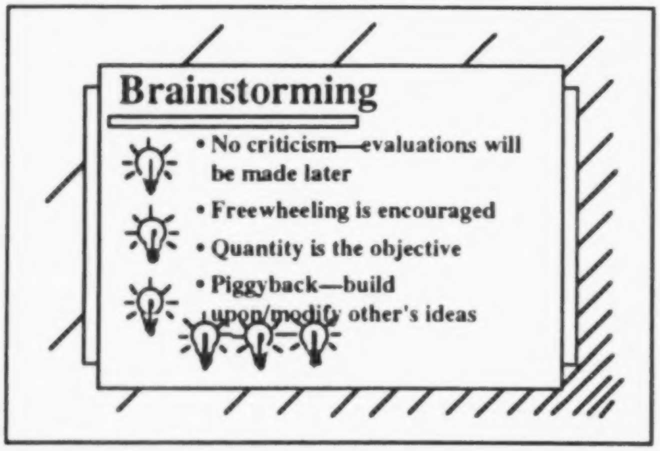
Probability-Impact Chart





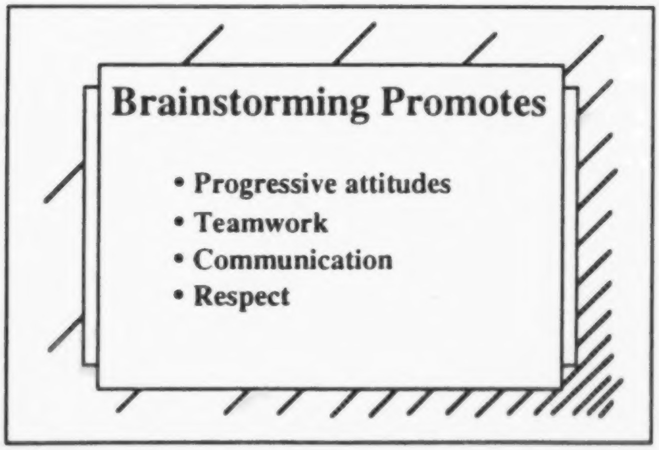
Forecasting Event Impacts

- Select one of the top three events.
- Assume that this event occurs.
- Ask: what are the immediate implications for our organization (first-order impacts)?
- When first-order impacts are exhausted, go to each impact and repeat exercise.



Brainstorming

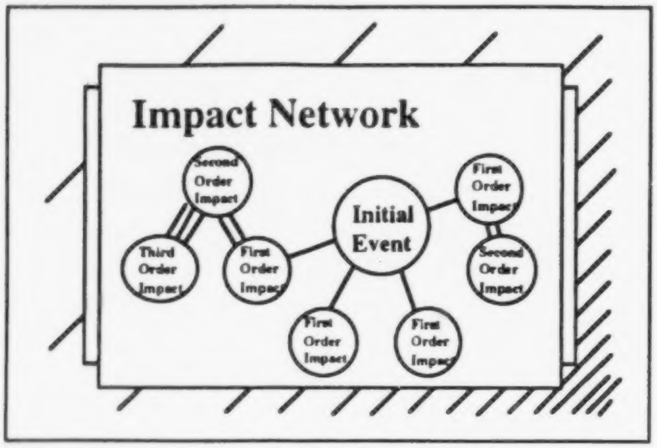
- No criticism—evaluations will be made later
- Freewheeling is encouraged
- Quantity is the objective
- Piggyback—build upon/modify other's ideas



Brainstorming Promotes

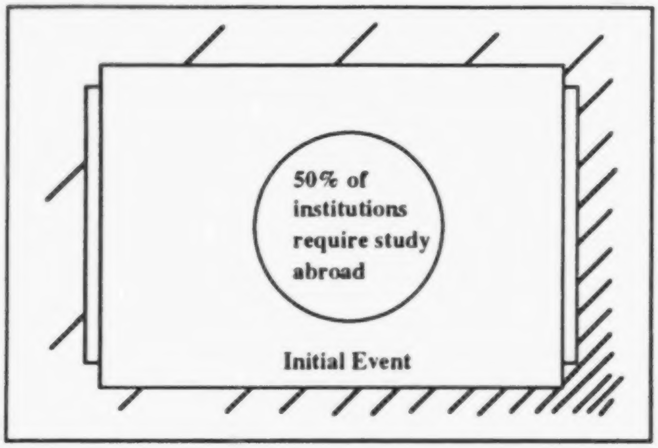
- Progressive attitudes
- Teamwork
- Communication
- Respect

Notes



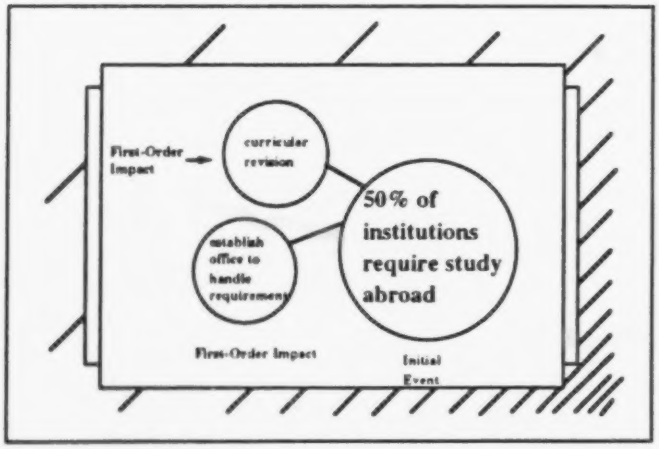
Impact Network

Second Order Impact
Third Order Impact
First Order Impact
Initial Event
First Order Impact
Second Order Impact
First Order Impact
First Order Impact

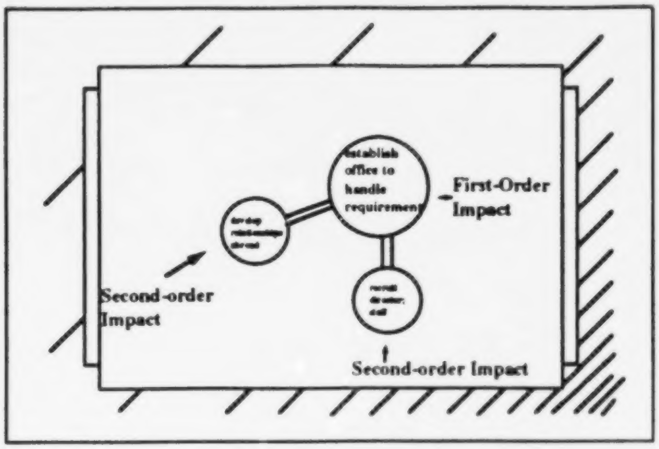


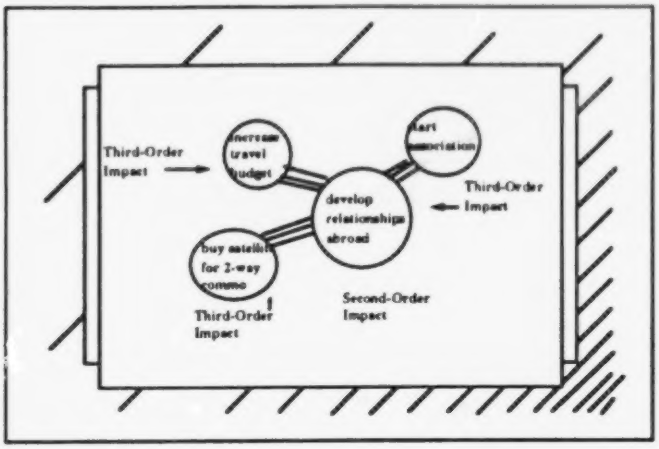
50% of institutions require study abroad

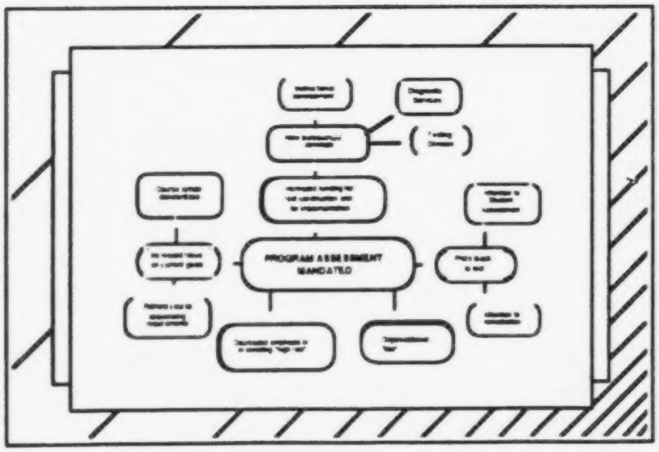
Initial Event

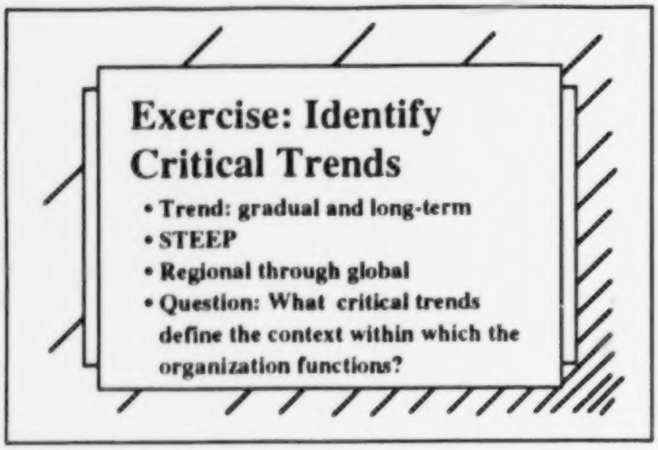


First-Order Impact
curricular revision
establish office to handle requirement
50% of institutions require study abroad
First-Order Impact
Initial Event


stablish
office to
handle
requiremen
First-Order
Impact
develop
relationships
abroad
Second-order
Impact
recruit
director,
staff
Second-order Impact

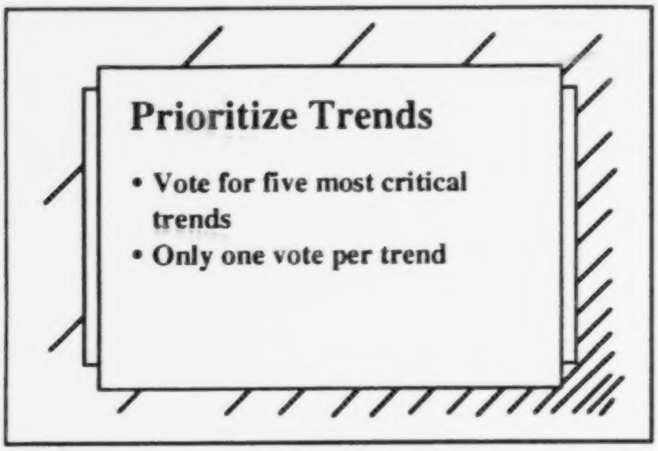

Third-Order
Impact
ncrease
travel
udget
tart
sociation
Third-Order
Impact
develop
relationships
abroad
buy satelli
for 2-way
ommo
Third-Order
Impact
Second-Order
Impact


PROGRAM ASSESSMENT
MANDATED



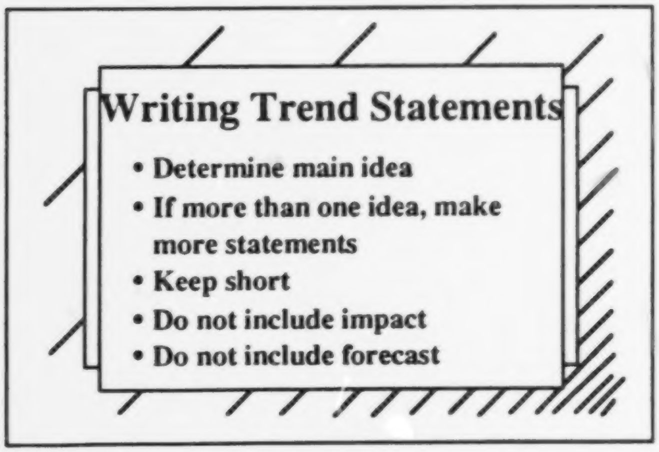
Exercise: Identify Critical Trends

- Trend: gradual and long-term
- STEEP
- Regional through global
- Question: What critical trends define the context within which the organization functions?



Prioritize Trends

- Vote for five most critical trends
- Only one vote per trend



Writing Trend Statements

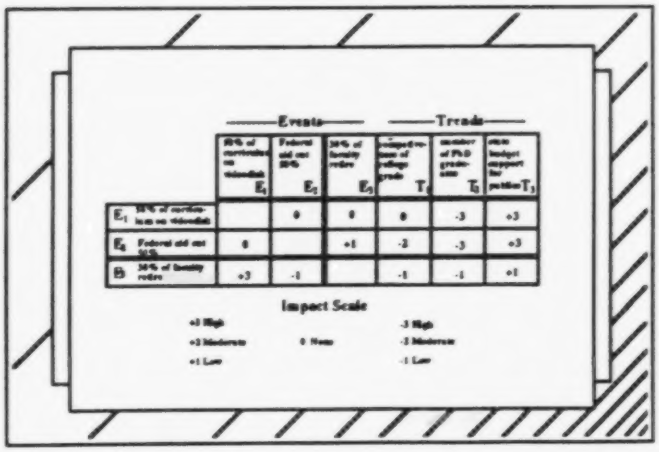
- Determine main idea
- If more than one idea, make more statements
- Keep short
- Do not include impact
- Do not include forecast

Forecasting Trends

- Assume today equals 100
- What was the trend level five years ago?
- What will it be in five years?
- What will it be in 10 years?

Cross-Impact Analysis

- Pair-wise examination of Ts and Es
- Can merge internal with external analysis
- Forces explicit assumptions
- Facilitates "world view" of team
- Fosters richer scenarios



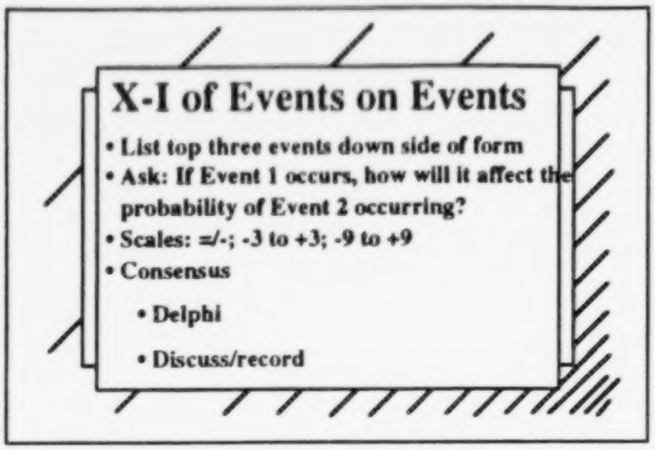
	Events			Trends		
	30% of curriculum on videodisk E_1	Federal aid cut 50% E_2	30% of faculty retire E_3	[illegible] of college grads T_1	number of PhD graduates T_2	state budget support for public T_3
E_1 30% of curriculum on videodisk		0	0	0	-3	+3
E_2 Federal aid cut 50%	0		+1	-2	-3	+3
E_3 30% of faculty retire	+3	-1		-1	-1	+1

Impact Scale

+3 High
+2 Moderate
+1 Low

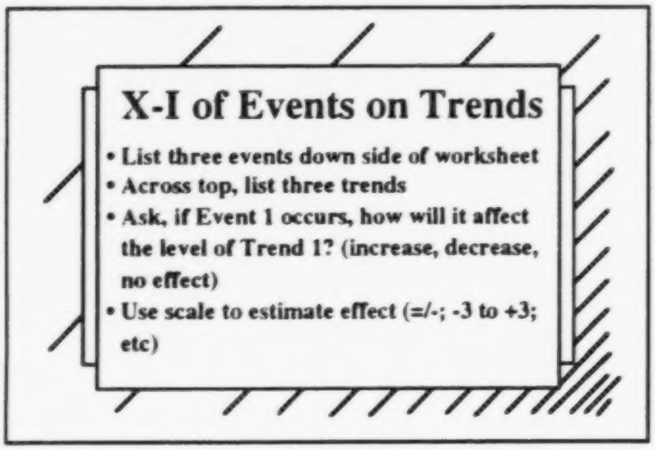
0 None

-3 High
-2 Moderate
-1 Low



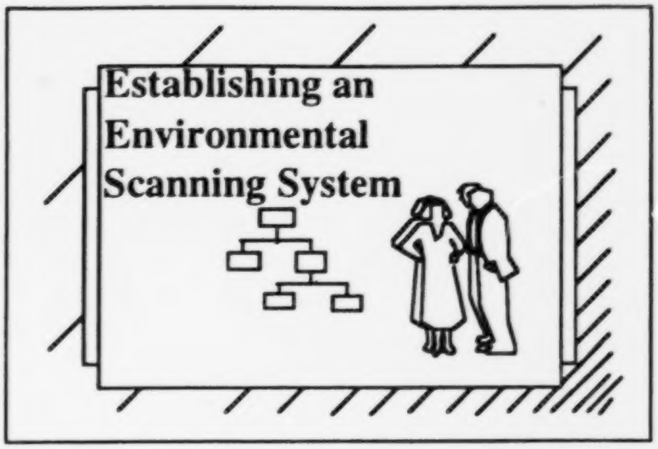
X-I of Events on Events

- List top three events down side of form
- Ask: If Event 1 occurs, how will it affect the probability of Event 2 occurring?
- Scales: =/-; -3 to +3; -9 to +9
- Consensus
  - Delphi
  - Discuss/record

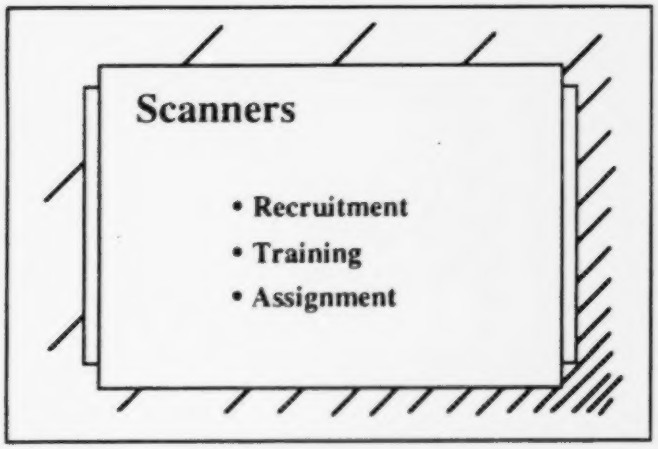


X-I of Events on Trends

- List three events down side of worksheet
- Across top, list three trends
- Ask, if Event 1 occurs, how will it affect the level of Trend 1? (increase, decrease, no effect)
- Use scale to estimate effect (=/-; -3 to +3; etc)

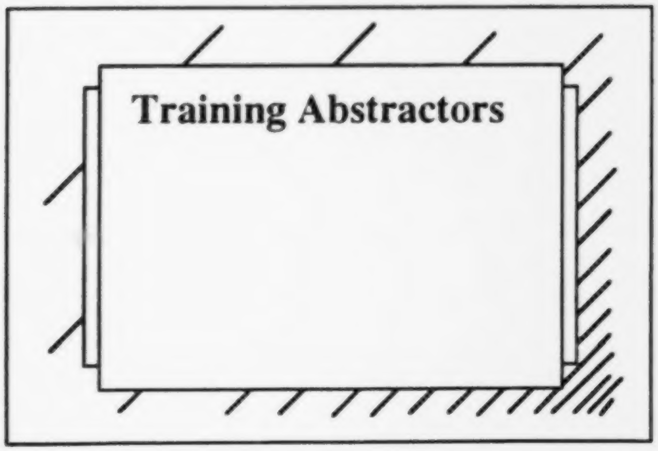


Establishing an Environmental Scanning System

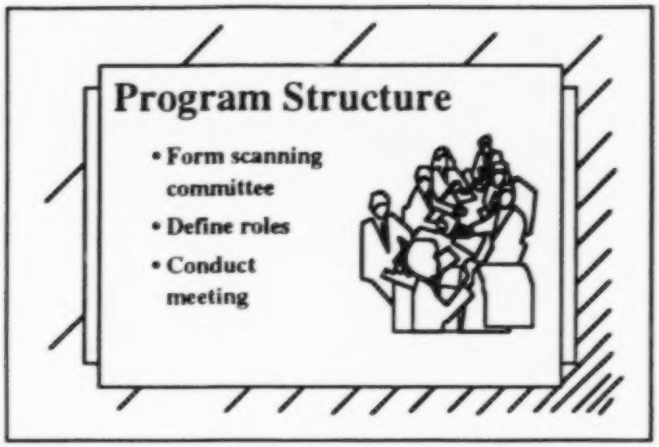


Scanners

- Recruitment
- Training
- Assignment

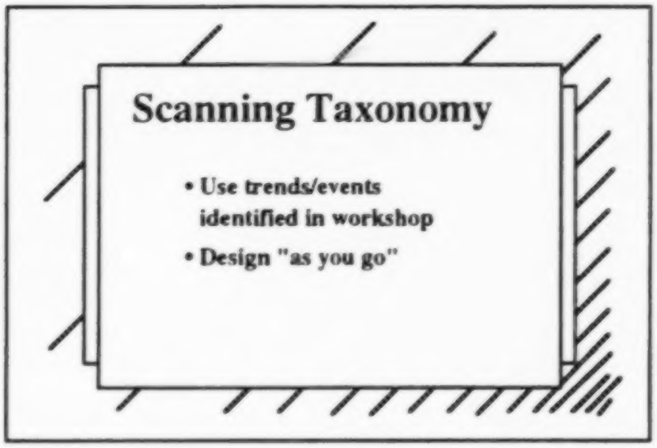


Training Abstractors



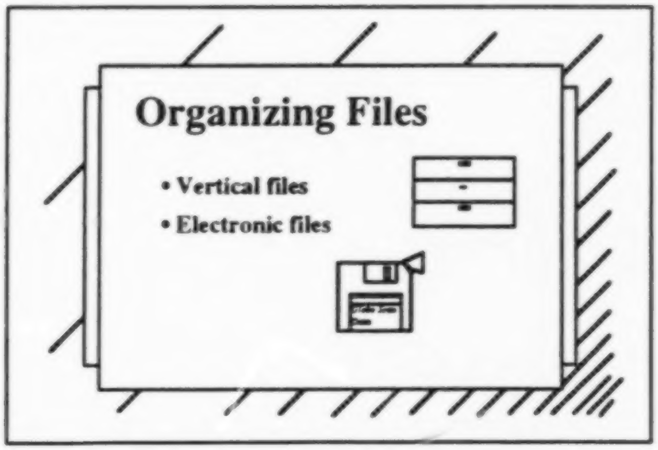
Program Structure

- Form scanning committee
- Define roles
- Conduct meeting



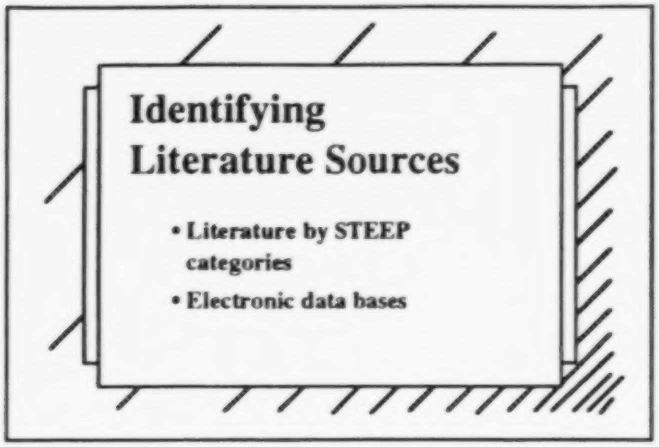
Scanning Taxonomy

- Use trends/events identified in workshop
- Design "as you go"



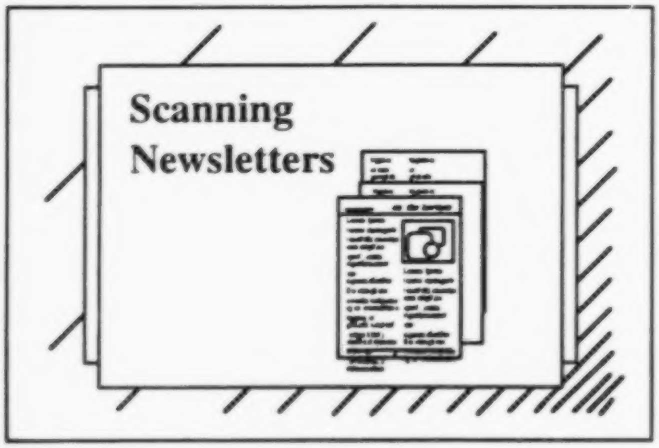
Organizing Files

- Vertical files
- Electronic files

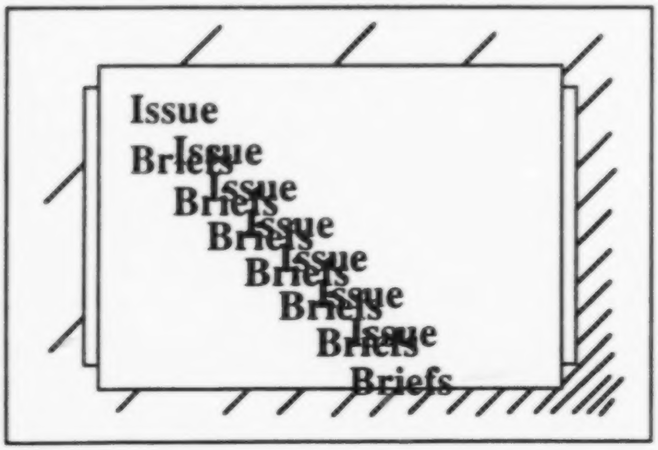


Identifying Literature Sources

- Literature by STEEP categories
- Electronic data bases



Scanning Newsletters



Issue Briefs

Issue Briefs
Issue Briefs
Issue Briefs
Issue Briefs
Issue Briefs
Issue Briefs

Appendix A

On the Horizon

the newsletter of environmental scanning
in higher education

on the horizon

Preview Edition, June 1992

Editor's Column

WELCOME TO OUR FIRST ISSUE

We live in turbulent times. During the startling developments in the former Soviet Union last year, David Brinkley stated that "each day seems to bring the dawn of a new era." Certainly the fall of the Berlin wall, the unification of Germany, the breakup of the Warsaw Pact, and the breakup of the Soviet Union, have transformed our world.

On the horizon is the possibility that the European Community may include Eastern Europe in the largest free trade zone the world has yet seen. In response, other free trade zones are in the making (e.g., the North American Free Trade Treaty between Canada, the United States and Mexico; Australia and New Zealand, and several South American countries). Are these signals of another momentous event—international free trade with concomitant dislocations of workforces and industries? If so, what are the implications for continuing education and for the globalization of the curriculum?

On the Horizon alerts members of the higher education community to driving forces and potential developments in the macroenvironment that constitute threats or opportunities to colleges and universities. We intend to live up to our title, *On the Horizon*, and even to our ever-so-faint subtitle on the masthead, *Beyond the Horizon*. To do so, we have asked a number of individuals to serve as consulting and contributing editors—some prominent in higher education, others prominent within the futures field. From time to time they will contribute

Editorial, p.2

United Way Strategic Institute Publishes *What Lies Ahead: A Decade of Decision*

The United Way Strategic Institute's Environmental Scanning Committee has just released the 1992-93 edition of *What Lies Ahead*. In this publication, the Committee updated the nine forces of change in American society identified in their 1989 publication, *What Lies Ahead: Countdown to the 21st Century*. These forces of change, called "ChangeDrivers" by the Committee, are summarized as follows:

ChangeDriver 1: The Maturation of America. The population continues to age, with the consequence that U.S. culture is shifting from a youth orientation to one focused on aging. The age groups that will demand the most attention are the 35- to 54-year-olds and those over 80 (the fastest-growing segment of the population). Political activism, reflecting an older population, will be pragmatic and measured.

The growth of the U.S. workforce will continue to slow, implying a more mature and experienced workforce. New technologies and changing job conditions will challenge workers. Employers will increasingly offer older workers phased retirement, flexible work schedules, and short time projects. More middle aged workers will start their own firms as opportunities for advancement are increasingly limited.

Not only is the population maturing, but the physical infrastructure of the country (roads, bridges) is aging, and will demand more and more attention in this decade. Government will increasingly join with business to cope with infrastructure repair costs.

ChangeDriver 2: The Mosaic Society. The diversity of America's population will become more pronounced, and, perhaps, increasingly polarized between the educational and economic haves and have nots. It is imperative that Americans and their institutions recognize and support the value of diverse cultures within the society. Racial and ethnic tensions will remain high. Schools will implement alternative options like magnet schools, year-round schools, and alternative teacher certification to address issues of quality, cost-effectiveness and teacher shortages. Minorities and women will comprise a larger proportion of the workforce. The ability to manage a diverse workforce will remain important due to its increasingly multilingual and multicultural nature. There will be greater availability of child-care benefits, including parental leave and flexible work hours. Workers will have more benefits, but will share in bearing their costs. Finally, minorities will continue to seek greater political influence commensurate with their numbers.

ChangeDriver 3: Redefinition of Individual and Societal Roles. There will be a continuing shift of responsibilities between societal sectors and between individuals and institutions. Reforms in public education will continue to emphasize the decen-

ChangeDrivers, p.2

Editorial, from p.1

pieces on developments they see on (or perhaps beyond) the horizon that could affect your work and future in higher education. They will also speculate on the implications these developments have for colleges and universities. You may not always agree with what they say, but we hope you will agree that the material stimulates your thinking.

In this preview edition we categorize our news into social, technological, economic, environmental, and political (STEEP) sectors, and seek to include developments in these areas at the local and global arenas. In subsequent editions we will add four other sections. One, *Issues,* is an ongoing Delphi process focusing on issues facing higher education. Each edition will relate your views of these issues, their importance, where they are headed, and their implications for colleges and universities. Another, *Tools,* is a look at both new and proven planning tools from inside and outside the educational establishment. These tools will include software, new data acquisition technologies, standardized instruments, and planning techniques, such as group process and conference management innovations. Another, *Using Scanning Information,* will illustrate how some colleges and universities use scanning information in academic or institutional planning. And finally, *Letters to the Editor,* a section in which you may respond directly to items and their implications in case you disagree with our assessments or wish to add to them.

You are invited to participate in all sections of this newsletter. In fact, the sections on *Issues, Letters* , and *Using Scanning Information* depend upon your input. We welcome items that serve as signals of change in any of the STEEP sectors. Please also provide a statement of the implications of these signals for higher education. If we use your contribution, we will give you credit for its submission. This has to be one of the easiest ways to get your name in print that we know!

ChangeDrivers, from p.1

tralization of authority to teachers and parents (school-based management) and choice programs. The pressure from individuals for empowerment to act for themselves will increase. (The focus on wellness illustrates a movement from a problem-based care system to one requiring more personal responsibility for eating and living "right.") Government support of human services will continue the pattern established in the 1980s, when authority and financial responsibility passed from the federal government to states and localities. Funding increases are not likely, given growing fiscal problems at all levels of government. There will be continued privatization of government services, including prisons and social services. By the end of the 1990s, there will be greater focus on individual self-sufficiency and less reliance on insti-

ChangeDrivers, p.5

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Master's Program for International Executives

The London Business School announced a unique master's degree program for senior international executives. Executives, sponsored by their employers, will be able to keep their jobs during the two-year program that will culminate in a master's degree in the science of management. No more than 30% of the students will come from any one country. Participants will be expected to speak at least two languages, and will travel to nine sessions to be held in London, Berlin, and other locations. According to program director, Chris Voss, "The aim is to develop the international manager rather than the domestic manager." This multicultural learning experience grows out of a need for international business expertise as national borders come down in the European community and around the world. (*Durham Herald Sun*, 6/23/91, p. B7)

> **"Stanford has initiated cuts up to 13% on academic and administrative expenses to trim its budget $43 million over the next two years."**

Implications

To be competitive in a global economy, U.S. institutions of higher education must equip students to function in an international marketplace. Ideas and programs that will mushroom in the 21st century will include international scholars in residence, increased emphases on foreign languages and cultural studies, study abroad programs and other international cultural exchanges. It will be the unusual student who does not speak another language or who has not spent at least one semester ourside his or her country.

Recession forces colleges and universities to rethink roles

Federal and state budget cuts are not news to anyone in these days of tough economic times. Major universities are being forced to look at deficits in the millions of dollars over the next months. According to Anthony DePalma, Columbia University is currently laying out a strategy to meet deficits that in 1993 could reach $87 million. Stanford has initiated cuts up to 13% on academic and administrative expenses to trim its budget $43 million over the next two years. These are but two examples of institutions across the U.S. that face such severe budget problems, the effects of which will undoubtedly reach deep into classrooms and student services. (*New York Times*, 2/3/92)

Implications

Significant tuition increases and cuts in financial aid are again on the horizon. How much can the consumer of higher education take when tuition at some of America's elite universities tops $20,000 a year? Tuitions at public institutions are also rising. Community college enrollments will continue to soar in these times of tight pocketbooks.

Budget reduction forces administrators to re-examine institutional missions. They are reconsidering concepts such as "academic excellence" and "quality education." Some leaders in the higher education community have indicated that the 20th century research university, as we know it, will cease to exist. New paradigms for higher education are being conceived, based on the rapid changes that are occurring in our country and in our world. Surviving in the world of higher education in the coming decades will take proactive, creative leaders who can identify signals of change and plan for an uncertain future.

Japan Colonizing U.S. Industries

The *zaibatsu* refers to cliques of interlocking Japanese banks and companies dating back to the late 19th century. Today, forming economic groups bound by interdependencies has become a way of thinking and behaving that is institutionalized in Japan, and accounts for 27% of Japan's assets and 25% of its sales. The clannish *zaibatsu* mentality gives the pattern of Japanese investment in America its unique vitality and form, whereby banks make low-cost capital available to sister companies for the long-term investment needed to create market domination. Investment in vertically integrated enterprises is becoming a key factor in strategic sectors of the U.S. economy (e.g., Toyota produces 200,000 cars a year in its Kentucky plant through a network of Japanese-owned suppliers). Robert Kerns says, "This is not a conspiracy. It's the natural extension of Japan's indigenous form of economic growth as Japan's economy takes on new global proportions." To a degree *Zaibatsu*

Economics, p.4

Economics, from p.3

America can be likened to a giant leveraged-buyout of parts of the U.S. economy, financed by extravagant purchases of Japanese products. Kerns states, "It is not far-fetched to image a time when Japan's powerful Ministry of Finance would have a direct input into U.S. economic policy and could openly influence its course. . . . It's only natural for a lender whose loans are growing, to demand a say in the way a corporation or a country's economy is run." On the positive side, Japanese investment is creating jobs, and Japanese management techniques challenge many U.S. firms to improve their operations. (Robert L. Kearns, *Zaibatsu America: How Japanese "Firms Are Colonizing Vital U.S. Industries,*. New York: the Free Press, 1992 as reported in *Future Survey*)

Implications

To face the *zaibatsu* monolith, the U.S. needs to increase the rate of saving, increase spending on R&D, improve education, cut the budget deficit and redefine national security in terms of broader economic and technological security. Research universities have the responsibility for continuing state-of-the-art research; all colleges and universities need to focus on preparing graduates to meet the needs of economic institutions under fire.

Japan as World Leader in 2015?

Rather than the Cold War and communism, America now faces a new challenge in the form of Japan's drive toward global technological and economic mastery. According to William S. Dietrich, President of Dietrich Industries, and holder of a Ph.D. in political science, the Japanese are winning the contest. Japan has uncontested dominance in every leading-edge industry; its GNP is twice that of the U.S., and per capita GNP is four times ours; Japan is the world's financial center of the new world economy; second-tier nations are those in East Asia with economies closely linked to Japan; third-tier nations include the US and EC as buyers of East Asian high-tech products; Japan owns over 40% of U.S. manufacturing assets, holds 50% of U.S. bank assets, controls a considerable amount of basic and applied research, and has amassed extensive media holdings in the U.S.

The causes of the U.S. economic decline are system-wide managerial, financial, and political shortcomings. Specifically, American political institutions include an anti-statist tradition (unlike Japan, Germany and France). Moreover, there are long-standing adversarial relations between labor/management/government, an explosion in liability awards, government of transients and amateurs, and the democratic deadlock in formulating national policy. To Dietrich, the U.S. can meet Japan's challenge only by adopting an American version of Japanese industrial policy with a strong central state and a top professional bureaucracy. (William S. Dietrich, *In the Shadow of the Rising Sun: the Political Roots of American Economic Decline*. University Park, PA: Penn State Press, 1991, as reported in *Future Survey*.)

Implications

U.S. colleges and universities face the challenge of producing graduates who can assist American businesses to compete in a global economy. A shift in curriculum to include emphases in languages, non-Western history, and area studies is essential to this task. Also needed is a new commitment to study abroad programs.

The argument by Dietrich and others (e.g., Perot) implies that American colleges and universities must reemphasize their role in American industrial development or they will encourage alternative educational programs outside the establishment that more specifically address the needs of American industry.

Raising Productivity in Services

Peter Drucker argues that "The single greatest challenge facing managers in the developed countries of the world is to raise the productivity of knowledge and service workers." For the last 120 years productivity in making and moving things has expanded 45-fold. But these gains are unraveling because there are too few people employed in making and moving things for their productivity to be decisive. We need another productivity revolution. New technology will not by itself generate higher productivity. Increases in productivity can only come from "working smarter," (i.e., from defining the task to be done and from eliminating what does not need to be done). A major insurance company recently increased the productivity of its claims-settlement department fivefold by eliminating detailed checking on all but very large claims. Hospital nurses spend half their time in paperwork (doing what they are not paid to do), and college faculty spend many hours in largely useless committee meetings. Such splintered attention is more and more the norm in many organizations. To increase productivity in the service and information sectors, management must (1) define the task, concentrate work on it, and define performance; (2) build a partnership with service workers so that responsibility is built into every knowledge and service job regardless of level; and (3) acknowledge that knowledge and service workers learn most when they teach and develop their enterprise into a teaching institution. (Peter F. Drucker, *Harvard Business Review*, 69:6, Nov-Dec 1991, 69-79 as reported in *Future Survey*.)

Economics, p.8

ChangeDrivers, from p.2

tutions. Corporate downsizing will accelerate while offering greater work responsibility, equity stakes, and reduction of bureaucracy. The need for a flexible work force, one that can quickly adapt to market changes, will be increasingly important as organizations become flatter (have fewer layers of management). Union membership will continue to decline. Alternative forms of employee representation, such as regulation and litigation, will continue to emerge.

> "Quality of life versus economic well-being will be a dilemma of the 1990s."

ChangeDriver 4: The Information-Based Economy. Technological advances will continue. Mass customization will typify the '90s—from customized bicycles to software with object programming. Instructional technology will continue to enhance education as a teaching and learning aid. Concern about the scientific literacy of the population will continue to increase. The telephone will increasingly be used as the gateway to sophisticated communications services. Video, audio, and data transmission will increasingly be integrated into a single fiber optic telephone system. The mobile communications environment will continue to develop as portable phones, facsimile machines, beepers, satellites and computers make two-way, 24-hour accessibility anywhere in the world. The schism between info-rich and info-poor will continue to grow. Changing employment conditions and new technologies will continue to challenge workers. The erosion of individual privacy will continue to grow.

ChangeDriver 5: Globalization. Movement of products, capital, technology, information, and ideas around the world will continue at a record pace. The democratization of Eastern Europe and Russia and free trade agreements along with international investments in business and real estate around the world increasingly pull all nations into the global economy. However, economic and civil strife is likely to continue in the former Soviet Union and Eastern Europe, causing the inflow of foreign investment to remain small. Regional economic blocs will increase in number and in economic importance. International migration, both legal and illegal, will accelerate in the 1990s. Prosperity is increasingly dependent on trade with, and the economic well-being of other nations. Greater international competition for markets will continue. Global leadership in science and technology will determine economic leadership.

ChangeDriver 6: Economic Restructuring. Large-scale economic transformation of American business brought about by global economic competition, deregulation, rapidly changing technologies, and diverse and changing consumer tastes will continue. Large firms will accelerate the downsizing of their management staffs. The formation of low-skill jobs rather than high-skill jobs will increase. The number of home-based workers will increase, as will workplace options such as satellite offices. Increasing numbers of immigrants will be highly skilled technological and scientific workers.

ChangeDriver 7: Personal and Environmental Health. Quality of life versus economic well-being will be a dilemma of the 1990s. We are increasingly concerned about air, water, and food quality. In the U.S., there is continued questioning of the quality of, and access to, the nation's health-care system. Health-care costs will accelerate the issue of cost sharing between employers and employees and will increase the probability of strikes over benefits offerings. The AIDS epidemic will become increasingly critical. Concern about substance abuse and in resolving the issue of long-term care provisions will continue. Alternative forms of health care delivery, such as holistic medicine and self-help groups, will continue to grow in popularity. With respect to the environment, the concern about the connection between energy types and use and environmental crises will increase, with corresponding demands on elected officials to focus on environmental issues. Finally, the economic consequences of global environmental climate change will receive increased attention.

ChangeDriver 8: Family and Home Redefined. There will be growing acceptance of nontraditional family groups. Men and women living having children out of marriage, single women having children by choice, gay and lesbian men and women having open relationships, and "friends" just living together are being accepted by courts, employers and society in general as "families." Many observers see the 1990s as a decade when Americans will return to the simple life, embracing home and family. The divorce rate is expected to decline. Multigenerational households and families will increase. Leisure time will continue to grow in importance. Home is being transformed into an office by more and more people (28% of the U.S. workforce works at home).

ChangeDriver 9: Rebirth of Social Activism. Americans are becoming more concerned about social issues. The ACE-UCLA annual survey of entering college freshmen found the highest level of involvement in social-action activities in history. The 1990s will be a decade of people wanting "community action" that produces results. Racial and ethnic ten-

ChangeDrivers, p.6

ChangeDrivers, from p.5

sion will remain high; violent crimes are expected to increase. The poverty rate is likely to increase as will the number of homeless Americans. There will be an increased recognition of the importance of children's physical and mental wellness—especially in relation to the provision of family support services—a recognition that will become integral to public education reform.

Implications

Funding for research in the following areas is likely to increase: gerontology; the roots of crime (poverty, substance abuse, etc.); AIDS education, treatment and prevention; and the efficacy of alternative forms of health-care delivery. Increasing attention will be given to curricular programs on multicultural education and programs to reduce racial and ethnic tensions, as well as continuing education programs for those wanting to start their own businesses. Curriculum committees will spend more time on reviewing graduate and undergraduate programs vis-`a-vis their relevance to preparing graduates to function in an increasingly multicultural, multilingual, and diverse workplace facing increasing global economic competition. Provosts will increase their efforts to train faculty in instructional technologies to enhance learning, including distance education. They will also take advantage of the growing interest among business, organized labor, and government to form partnerships. Advances in computer and telecommunications technologies will continue to offer the potential for improvements in administrative functions vis-`a-vis data collection, analysis, communication, and program assessment. We must do all of this with little increase in government funding.

Social

Increasing Adolescent Violence

Violence has replaced communicable diseases as the primary cause of death for American teens. Appalling statistics confirm an epidemic of violence that has no parallel in any other industrialized nation of the world. Nearly 80% of all teenage deaths are the result of violence—from homicides, suicides, motor vehicle crashes, and other unintentional injuries. And for the first time, firearm death rates for both white and black male teenagers exceed the total from all natural causes. The extent of this escalating national problem is evident from statistics:

Teenage homicides—up 300% in the last thirty years.

Suicide rate for 15 to 19 year olds—tripled to 10 per 100,000 in the past thirty years.

Firearm death rate for 15 to 19 year olds—up 43% between 1984 and 1988. (*Emerging Issues*, 1992, as reported in *Happenings*)

Implications

If present trends continue, American schools and colleges and universities will be increasingly unsafe. More resources will have to be allocated to campus security and to crime prevention. Personal security may become a major factor when students, especially women students, select their college. Time, money, and energy devoted to the problem of violence detracts from students receiving a quality education. Progressive campuses will declare themselves "gun-free" and find ways to restrict access of the outside community to campus events. Campus counseling centers will need additional trained staff to deal with victims of violent acts and to promote self-defense education.

Top Issue Facing the Nation

A poll conducted by The Roper Organization found that 83 percent of Americans think that drug use was the most serious problem facing America in 1991. (*What Lies Ahead*, 1992)

Implications

In the 1980's we have witnessed many colleges and universities hosting proactive drug and alcohol awareness seminars and symposia. It is essential, however, to step up prevention and education programs and to continue to investigate the use of state-of-the-art treatment methods on campus. It is important for higher education institutions to widen the scope of drug and alcohol prevention and treatment programs to include faculty and staff as well as students.

Middle Class "Pulling Apart" to Rich, Poor

A Census Bureau report released in mid-February, *Trends in Relative Income: 1964 to 1989*, provided further evidence that the nation's middle class has shrunk since 1969, while the proportion of Americans with high and low incomes has grown.

Using for the first time a "relative income" measure that takes family size into consideration, the Bureau reported that the percentage of persons with middle income fell from 71.2% in 1969 to 63.3% in 1989. In '89, median income for a family of four was $27,153. A family of four with an income below $18,576 was considered low, whereas a familty of four with an income of att least $74,304 was considered high.

The growing income inequality stems from several causes, including the increase in female-headed families, which are much more likely to live in poverty. Another cause is the increasing gap in wages, with more workers earning low wages at the same time highly skilled workers have made income gains.

The Census Bureau report also compared people by educational attainment. It found the biggest increase in poverty was among people without a high school education — from 21.7% in '69 to 38% in '89.

On the other hand, college graduates were the only educational group whose proportion of high income earners rose from 37.4% in '69 to 40.4% in '89. (Census Bureau 2/92)

Implications

The shrinkage of the middle class has meant that more children are living in poverty, increasing from 19.4% in '69 to 29.1% in '89. This is largely a result of increases in the number of female-headed households, but the number of kids living with both parents in a poverty situation has also risen. As with all bad economic news, this increases the demand for human services. As the percentage of children in poverty increases, the split between those with the resources to attend college and those without those resources widens. Increasingly the United States moves to a two-tiered educational system based on economic status and not ability. Community colleges should benefit at the expense of public and independent four-year colleges. Advocates of social justice may not tolerate such a two-tiered system and will force government to increase Federal support for low-income students. This move would benefit higher education; however, government may also implement cost-cutting measures such as capping tuition rates, salaries, and overhead and other expenses. Legislating costs may limit the quality, size and variety of programs offered and place publicly funded institutions in a weak position to compete with privately funded institutions for talented students.

Home and Not Alone

In the late 1970s, only 10,000 or so children were being taught exclusively by their parents at home. Today that figure has grown to over 250,000. Home schooling has gained in popularity among parents who believe traditional classrooms fail to teach values.

> **"Perhaps our schools of education should . . . explore special programs for 'home instructors.'"**

Most parents have religious motives for "home schooling" their kids. But home schooling appeals across religious and ideological boundaries, says Pat Lines, a Catholic University professor who researches home schooling for the U.S. Department of Education. Home schooling families come from all social classes, and almost always it is the mother who does the teaching. A desire to spend more time with their kids is a common reason a parent chooses home schooling, says Lines. Or, she says, "antibureaucratic views" may be behind the decision.

Indeed, home schooling can be considered the ultimate in school choice. It affords parents an unparalleled flexibility. They determine values, curriculum, and even school hours.

Critics, including the National Education Association and some psychiatrists, maintain that children who are schooled at home suffer academically and socially. University of Chicago child psychiatrist Bennet Leventhal says the children do not "learn to deal with bad and sordid things" that regular students encounter.

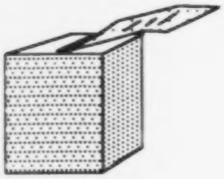
Home schooling growth has even spawned new businesses: firms that provide workbooks, textbooks, and lesson plans. Some provide counseling for parents who need help with the curriculum and others grade students' work and keep records.

In 1982 only two states had laws guaranteeing the rights of home schoolers, now 34 states have passed such laws. (*Insight*, 12/2/91 as reported in *Happenings*)

Implications

Perhaps our schools of education should in conjunction with their continuing education centers explore special programs for "home instructors." Research is needed on how "home schooled" students do when they enter institutions of higher education. Security and "campus culture" issues are likely to be important factors for college selection by home-schooled students.

Political



National Program Approved to Support Overseas Study

Legislation introduced by Senator David L. Boren (Dem., OK), the National Security Education Act of 1991, passed both houses of Congress late in 1991. Enacting this bill will increase opportunities for undergraduates to study abroad, and will support the training of language and area studies specialists.

The idea for this program emerged in part from a desire to provide the federal intelligence and security agencies with a robust pool of experts on critical regions and languages around the world. The legislation was criticized, however, for its suggested link between the intelligence agencies, students, and universities. Boren stated that a governing board would be responsible for the program's independence and its integrity. He said that the bill included "an express prohibition on the use of these students for any intelligence-gathering activities."

This program is the most significant education initiative of its kind since the National Defense Education Act of 1958. The Boren Bill authorizes a new international education trust fund of $150 million, the income from which will finance overseas scholarships for undergraduates and fellowships for graduate students. According to *The Chronicle of Higher Education*, the legislation will triple the amount of federal dollars now being spent on undergraduate study abroad, and will increase by 40 percent the funds available for graduate language and area studies. Boren indicated that there is a goal of having the first grants available to students by the fall of 1992. (*The Chronicle of Higher Education*, December 4, 1991, p. A55.)

Implications

This legislation will enable many more U.S. students to travel abroad for study. Moreover, implementing the program will allow lower and middle income students to participate in cross-cultural, international education. Humphrey Tonkin, president of the University of Hartford and chairman of the Council for the International Exchange of Scholars, indicated that staggering low numbers of minorities have participated in past study abroad programs. Additionally, fewer than one percent of U.S. undergraduates study in foreign countries. This program, then, will be a step toward equipping students with the cultural and linguistic expertise to compete effectively in the new international environment. U.S. higher education administrators and faculty will have the opportunity to place a new focus on study abroad and will be able to direct students toward new resources to finance international higher education.

U.S. Supreme Court Applies Sex Bias Law to Schools

A surprising, unanimous, February 26th (1992) Supreme Court ruling could set in motion untold numbers of law suits by women and girls who claim that they have been victims of gender bias in school programs—including athletics. This decision follows the 1972, Title IX law that bars gender discrimination at any education program that receives federal aid. This ruling means that bias victims, including female football players and male cheerleaders, can bring suit against institutions for unlimited monetary damages, rather than just call for a change in biased behaviors. This decision is contrary to the Bush administration position, which contends that the law does not permit monetary damages. (*USA Today*, 2/27/92)

Implications

Lawsuits charging gender, race, or religious discrimination against institutions for monetary damages add a new dimension to an increasing litigious society. Colleges and universities will have to go beyond equal opportunity hiring and team building to be prepared to pay damages to any individual who can prove a case of bias. Increased legal fees, damage awards, and liability insurance could prove to be quite costly for institutions of higher education in the future.

Pork-barrel Science

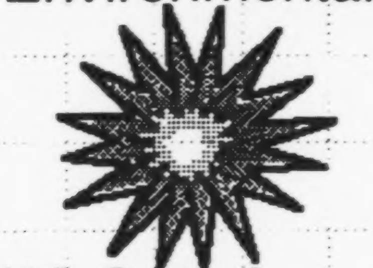
The increased moneies set aside by Congress for research projects at specific colleges and universities have critics decrying "pork-barrel science". Such moneys are channeled directly to colleges and bypass the normal competitive review process. The amount has more than doubled from the $225 earmarked in 1988. In 1991, $491 million was allocated for these types of projects. Institutions in five states (West Virginia, Massachusetts, Pennsylvania, Louisiana, Michigan) got 35% of the earmarked funds. (*The Arizona Republic*, 4/12/92)

Implications

The public's awareness of institutions of higher education participating in what many would view as a questionable practice will contribute to the continued decline in the respect of the public towards higher education as a social insti-

Political, p.10

Environmental



U.S. Concedes Anti-Warming Measures

The United States recently agreed to reduce its carbon dioxide emissions and donate $75 million to help developing countries do the same. These concessions are part of negotiations toward an international agreement to help stall global warming, held at the United Nations in February of this year. It is hoped that the U.S. will join other nations in signing an international agreement in June at the United Nations Conference on Environment and Development, to be held in Rio de Janeiro, Brazil.

Particularly, the U.S. agreed to reduce its own emissions of greenhouse gases by:

1. Improving energy efficiency by raising standards for buildings and appliances.

2. Encouraging the use of vehicles that run on alternative fuels, the use of public transportation, and research on electric cars.

3. Supporting research on more efficient aircraft and trains, new methods of energy generation, and encouraging industrial waste reduction and recycling.

Implications

Updated environmental measures will affect colleges and universities most directly through their physical plants and equipment holdings. New standards for buildings and appliances will be costly as administrators work toward compliance. Recycling, which has begun in many pilot programs on campuses, will most likely be institutionalized, coordinated, and regulated. On the horizon, institutions of higher education will be hiring officers to oversee environmental affairs.

The Emerging Energy-Environment Crisis

The Gulf War highlighted the connection between energy and the environment. It left hundreds of oil wells burning out of control, sending clouds of particulates and acid rain as far as southern China and the Soviet Union. It also produced the worst oil spill in history.

A less spectacular but far more pervasive energy-environment crisis is emerging, one that may eventually make Gulf War environmental damage seem minor. This emerging crisis is caused by the use of oil and other fossil fuels. It is not a crisis of high energy prices, but one of low prices encouraging wasteful consumption and discouraging investments in energy efficiency and alternative energy sources. The environmental consequences include deteriorating urban air quality, acidification of lakes and forests, crop losses, and global climate change. *What Lies Ahead: A Decade of Decision*, United Way of America, 1992, p. 89)

Implications

In the next decade and beyond, higher education administrators will be challenged with making energy usage decisions for their facilities based on environmental concerns in addition to cost related issues. Moreover, leaders in higher education will be held accountable for how their decisions affect the environment and will be especially how they will preserve natural resources. Perhaps universities and colleges will become the testing grounds for the efficiency of and the environmental soundness of renewable energy sources. University research projects on the ozone, particulates, and acid deposition are expected to increase.

> **"A less spectacular but far more pervasive energy-environment crisis is emerging, one that may eventually make Gulf War environmental damage seem minor"**

Economics, from p.4

Implications

American college and university administrators will need to take the lead in drawing their academic community into dialogue to address ways to work together and to work smarter. Progressive institutions will find ways to integrate principles of Total Quality Management and similar programs into their organizational culture.

Political, from p.9

tution. Such loss of respect among the general public could diminish the credibility and the intellectual and moral leadership of American higher education as a social institution during a decade when the public has few sectors of society or social institutions to look up to. [See Bellah, Madsen, Sullivan, Swidler, and Tipton's *The Good Society* (1991, Knopf) for a discussion of the role and responsibility of our social institutions, including education, in addressing the problems of contemporary American democracy].

Technological

Publication Goes Electronic

A new electronic journal, *Current Clinical Trials*, will contain results of research on new and established medical treatments for diseases. The technology used to transmit the journal was developed by the Online Computer Library Center, a partner in the venture.

Speed is one great advantage of electronic publishing. The elimination of the printing process and mailing time will reduce the time it takes for readers to get valuable information (a reduction of two months). Another advantage of the electronic journal is the user's capacity to customize the format of the electronic system. For example, a reader can specify what information one is interested in on a regular basis, and whether one wants to view tables side by side with text or whether to set them aside for later use.

Initially, the new journal will be available on IBM desktop and compatible computers, for a subscription cost of $110 a year. The availability of the publication on Apple Macintosh computers is expected by 1993. Libraries will be able to receive the journal on microfiche, as well. Users will be able to search the data base by key words, subjects, authors, or titles. The new journal will publish research 24 hours a day, with user availability 14 hours a day, with the exception of Sunday. Each time users sign on, the system will alert them to material published since the last time they used the program. (*The Chronicle of Higher Education*, 10/2/91).

Implications

With the increasing cost of journals in print and the anticipated reduced cost of electronic publications, great changes in information science for colleges and universities are on the horizon. The university of the future may consist of much less paper, and more personal computer work stations. The library may be accessed electronically. Students, faculty, and college staffs of the future will be able to send and to receive information from their desk tops. As electronic communication increases, institutional boundaries break down. Interinstitutional collaboration becomes the norm. Research projects have the potential to increase in scope and in applicability due to multi-inputs from different points of view. The world moves closer to a global community concept where students and professors have international contacts who can update them on global events at a moment's notice.

High-Tech Happenings

Although high technology in education has not entered the mainstream the way it has elsewhere, many experts contend that it will in the next decade. The following is a sampler of what is new in educational technology.

CD-I (Compact Disc-Interactive): Looks like a music CD, but contains movies and animation with which users can interact.

DVI (Digital Video Interactive): With these programs, students can call up a photograph, zoom in on an object, and pan the area to manipulate objects.

Graphing calculators help users to visualize numeric formulas through graphic readouts.

MBL (microcomputer-based laboratory): Plugs into the back of a microcomputer and transforms it into a sophisticated laboratory. A sensory probe can measure temperature, light, sound, or motion. (*Agenda*, Fall 1991)

Implications

The university of the 21st century will not resemble higher education as we have known it to date. Potentially, there will be less paper, less human interaction, and an electronic information explosion. Options for off-site learning will increase as new telecommunication devices become common place. Two-way satellite communications will enable learning to occur between institutions in this country and around the globe.

Appendix B

Lookouts

LOOKOUTS

Vol. 7 No. 1 JANUARY 1992 Editor: Donna McGinty

ANNOTATED CONTENTS

The Georgia Center's environmental scanning program is a component of strategic planning. Some sixty-five "scanners" represent top management and staff of the four operational divisions. All actively scan various sources of current information (publications, media, conferences, expert opinion) and identify threats and opportunities for Georgia Center programs and operations. Scanners submit scanning finds in writing to the director and attend, as primary duties permit, data-analysis meetings. Environmental scanning was inaugurated on September 1, 1985. (To volunteer as a scanner, please contact Donna McGinty, director's office.)

Pages

- TOP STRATEGIC CONCERNS (November, 1991) 2-4

Twice a year, two committees review and analyze scanning input. The Evaluation Committee (EC) is comprised of all Georgia Center scanners who are not assigned to serve on the Strategic Planning Executive Committee (SPEC). The EC is advisory; SPEC develops policy and takes action. Analysis by these two committees is a vital "check and balance" for strategic planning. Using a Macintosh HyperCard program developed by the Center (called HyperVote), scanners vote independently to select issues to be discussed. Committees will meet again in May 1992.

- PROGRAMMING SUGGESTIONS 5-7

Ideas for continuing education programs come from several sources, including client groups, faculty, and staff. Environmental scanning is another rich source of ideas. In addition to the programming possibilities included in this section, many more are found in the "Top Concerns" and "Monitor" sections of this newsletter.

- MONITOR (Trends, issues, and events revisited) 8-15

Scanners routinely monitor major trends, issues, and events, many of which have surfaced previously as Georgia Center top strategic concerns. Staying abreast of political, economic, technological, and social changes allows timely adjustment of the strategic plan.

- SCANNING ACKNOWLEDGEMENTS 15

- UPDATE: WHAT DIFFERENCE DOES ENVIRONMENTAL SCANNING MAKE? 16

Strategic planning and environmental scanning help Georgia Center managers respond to threats and opportunities in the external environment.

1785

The newsletter of the ENVIRONMENTAL SCANNING PROJECT of the
Georgia Center for Continuing Education, The University of Georgia, Athens, Georgia 30602

TOP STRATEGIC CONCERNS IDENTIFIED AND DISCUSSED
BY THE
EVALUATION COMMITTEE AND STRATEGIC PLANNING EXECUTIVE COMMITTEE
November 1991

- **THE CURRENT RECESSION IS ONLY ONE OF SEVERAL BUG-A-BOOS FACING PUBLIC HIGHER EDUCATION. OTHERS ARE A SEVERELY DAMAGED PUBLIC IMAGE AND ESCALATING TENSIONS BETWEEN LAND-GRANT INSTITUTIONS AND URBAN UNIVERSITIES. Taken together, these issues point to long term changes in resource allocations to public colleges and universities.**

Thumbnail Summary of Abstracts. An ACE survey shows that 64 percent of public four-year institutions have experienced recent budget cuts--some severe. Mergers and closures are being discussed as solutions. Another frequently reported tactic: reduction in course offerings, mainly in the evenings. **(Athens Daily News) (Weeks 1233)** By the end of the 1990s, the economy's growth rate may be as low as 1.8 percent a year or at best 2.6 percent. Either rate would make the 1990s the most sluggish decade since the 1930s when the growth rate averaged 1.9 percent. **(The Nation) (Brewer 1295)** Many state legislatures see higher education as having squandered the opportunity for innovation provided during the economic boom of the 1980s. Instead, precious resources and energies went into the creation of new and often questionable programs without cutting mediocre and outmoded programs. Now, presidents must make hard decisions related to questions of quality and comprehensiveness. **(Chronicle of Higher Education) (McGinty 1262)** The summer of 1991 saw higher education in the media spotlight, the catch being that the publicity was very bad. Many colleges and universities winced as they were publicly associated with a litany of scandals, including research funding irregularities, laboratory fraud, failure to teach undergraduates, athletic wrong-doings and "political correctness" debates. Any belief that universities had political immunity was shattered. **(Administrator) (McGinty 1260)** William Bennett, in his new role at the Heritage Foundation, perceives that "left-wing orthodoxy," in the form of "political correctness," has taken over the nation's campuses. He claims that the majority of college and university professors are divorced from the thinking of mainstream America, thus, seriously impairing the image of higher education in the public's eyes. **(Chronicle of Higher Education) (Copas 1264)** Southern legislators have been slow to grasp that higher education dollars ought to be spent where people live, not necessarily where the flagship institutions were built, i.e, Tuscaloosa, Oxford, and Athens. "Urban universities have become the economic generators in their cities." As their economic importance has grown, universities in Atlanta, New Orleans, Charlotte, to name a few, have also increased their roles as community leaders. Today, the University of Alabama at Birmingham is the state's largest employer. **(Atlanta Constitution) (McGinty 1269)**

- **LEADERS IN PUBLIC HIGHER EDUCATION (INCLUDING CONTINUING EDUCATION) ARE THOUGHT TO BE ILL-PREPARED TO DEAL WITH PROFOUND CHANGES COMING NOW THROUGH 2010. FOR ONE THING, THE MISSIONS OF TEACHING, RESEARCH, AND SERVICE ARE BEING REDEFINED IN A WAY THAT MAY RESULT IN THE PHASING OUT OF THE CONTINUING EDUCATION ADMINISTRATOR OF TODAY.** For several reasons, the trend is toward decentralization of continuing education. What does all of this mean for the Georgia Center which historically has championed centralized continuing education?

Ill-prepared Leaders Issue continued

Thumbnail Sketch of Abstracts: Increasingly, leaders in higher education will be beset by demographic shifts in the student body, i.e., the minority-majority, stiff competition for minority faculty, declining faculty morale, status, and real income, a "graying" of the professorate, and declining resources. The current mentor-models for developing leaders are inadequate for addressing change. Such models assume mentors are capable leaders and they preserve sameness rather than teach how to make a difference. **(National Forum) (Weeks 1258)** Russ Mawby of the Kellogg Foundation faults universities for failing to produce thought leaders in the past three decades. George Keller believes higher education is experiencing its most turbulence since the late 19th century. In his opinion, strategic planning is critical but will require a "whole new governance structure." **(Chronicle of Higher Education) (McGinty 1261)** Carol Aslanian appears convinced that traditional and non-traditional distinctions between students are meaningless. She has written, "...when age no longer predicts student behavior, age-related administrative structures on a college campus are challenged--and often are changed." A number of schools of continuing education have been closed or restructured to exclude administration of any credit courses. Some presidents have instructed their academic deans to assume responsibility for continuing education. **(Paper, "Back from the Future) (McGinty 1040)** Bob Simerly believes "The traditional three missions of teaching, research, and service will redefine themselves," ushering in the possibility of a phase-out "of the professional, full-time continuing education administrator who does not have an academic departmental affiliation. ...Continuing educators will be asked to alternate among teaching, research, and providing for outreach through their administrative duties." Already, the Carnegie Foundation for the Advancement of Teaching has called for a new vision of "scholarship," a blending of teaching, the discovery of new knowledge, and the integration and application of knowledge. **(Adult & Continuing Education Today) (Boland & Barrett 1243; Hardaway 1287) (Journal of Continuing Higher Education) (McGinty 1308)**

o **TODAY, CONTINUING EDUCATION PRIMARILY SERVES THE WHITE MIDDLE CLASS. THIS IS A REAL CHALLENGE WHEN VIEWED AGAINST PROFOUND SOCIETAL CHANGES IN THE MAKE-UP OF THE NATION'S AND GEORGIA'S TOTAL POPULATION AND THE NEED TO TRAIN AND RETRAIN A WORKFORCE LACKING IN BASIC SKILLS.** Without abandoning its white, middle class clientele, how can the Georgia Center be more accountable and relevant to the times?

Thumbnail Summary of Abstracts. According to Sharan Merriam, co-author of Learning in Adulthood, adult education primarily serves the white middle class. This status is often perpetuated by the courses offered and the issues selected for attention. According to Merriam, "The system wants to maintain itself, and there is a tendency for those in power to perpetuate the system because that is how they got there." **(Adult & Continuing Education Today) (Boland 1229)** "By the year 2000, one out of every three Americans will be non-white and minority; the majority of children in this nation will be non-white during the 21st century. ...Twenty to thirty million American adults are seriously lacking basic skills: they cannot read, write, calculate, solve problems, or communicate well enough to function effectively on the job or in their everyday life. **(College Board Brochure: "A Nation of Students") (McGinty 1270)** The "America 2000" federal educational reform package calls for American adults to return to school. In that 85 percent of workforce 2000 is already on the job, retraining is a high priority. **(Education Digest) (McLaurin 1282)** o **THE CABLE INDUSTRY AND THE BABY BELLS ARE POISED FOR A COLLISION ON THE INFORMATION HIGHWAY AND BOTH HAVE TREMENDOUS POTENTIAL FOR EDUCATIONAL DELIVERY.** Despite the unknowns and the resource crunch, shouldn't the Georgia Center be sorting out implications for self-directed learning and devising a strategy for knowing how and when to act?

Thumbnail Summary of Abstracts. Ninety percent of U.S. homes are cable-ready, although only sixty percent (about 55 million households) currently subscribe. Emerging technologies include digital compression which can expand a 35-channel system to 280 channels. The result will be greatly expanded niche programming, including specific and substantial audiences for educational programs of all descriptions. A complication for cable's future is that the seven regional Bell telephone companies are on the brink of being approved to enter the information service business, including original television programming, channels from other companies, and state-of-the-art interactive service. **(Naisbitt's Trend Letter) (Simpson 1239)** On October 30, 1991 the Supreme Court cleared the way for the nation's seven "Baby Bells" to provide electronic information services. The American Newspaper Publishers Association and the Consumer Federation of America fought this development all the way, contending that the Baby Bells are monopolies. In an interview an Atlantic Bell representative spoke to the implications for education: "...education will be delivered to the students and the students will not be delivered to the educators. The implications of tele-education...of remote education and the remoting of work, which are in the trial stage, will expand many, many hundreds of times in our company alone and across this country." **(USA Today) (McGinty 1312)** As these bottomless markets for video productions arrive, so does "desktop video." What the computer did for desktop publishing it is set to do for video production. "Although most of the new products are directed at the consumer market, many of them offer professionals the opportunity to eloquently bridge the...needs of clients with beer budgets and champagne expectations." **(Video Systems) (Pasquale 1242)**

NOTE: With limited educational technology dollars, a larger issue is how to set priorities among technology opportunities. For instance, previous scanning rounds have highlighted the potential for hypermedia in education. The Georgia Center has considerable talent in this area, although not included in the article that describes 101 successful uses of computer technology in college classrooms. **(Chronicle of Higher Education) (Miller 1274)** The University of Pennsylvania is one of some twelve universities experimenting with interactive videodisc technology to teach foreign languages. Could we reverse the notion and be among the first to develop hypermedia instruction for English as a second language? **(Chronicle of Higher Education) (Copas 1268)**

PROGRAMMING IDEAS
from the
November 1991 Analysis Round
Georgia Center Environmental Scanning Program

1. A national study* in late 1991 indicated the top 10 concerns of Americans were:

1. The faltering economy
2. Government misconduct and mismanagement
3. The medical-care crisis
4. Crime
5. Abortion
6. The tax burden
7. Government waste
8. The nation's crumbling infrastructure
9. The learning decline
10. Free trade

* Issues were identified in a Jack Anderson one-month study that monitored radio talk shows, letters to editors, and letters to congressmen.
(Parade Magazine) (Andrews 1304)

2. A poll conducted by The University of Georgia in Spring 1991 identified the top five concerns of Georgians:

1. Education
2. Other (included concerns related to the economy, personal safety, family problems, health, and personal problems)
3. Drugs
4. Unemployment
5. Crime

(UGA Survey Research Center) (Hargis 1328)

3. A series of marketing workshops could be based on Faith Popcorn's* pick of 10 trends that will define tomorrow's consumer:

1. COCOONING, a "growing bunker mentality."
2. FANTASY ADVENTURE, a desire to be "transported out of our lives" which are too hectic, too overloaded.
3. SMALL INDULGENCES, small ego expressions or sensory lifts replacing the conspicuous consumption of the 1980s.
4. EGONOMICS, "niche marketing in the extreme, a product or service for me."
5. CASHING OUT, "trading in the rewards of traditional success for a slower pace and a greater quality of life."
6. DOWN-AGING, "forty is what used to be thirty, sixty-five the beginning of the second half of life," led by (you guessed it) the babyboomers.
7. STAYING ALIVE is the consumer as a self-health activist, doing and eating all the right things, not trusting the experts to lead the way.
8. THE VIGILANTE CONSUMER "wants corporations with human faces, with people we can hold accountable and trust."
9. 99 LIVES, a reference to the frantic pace of the 1980s, builds on cocooning and cashing out; we are willing to buy back time.
10. S.O.S. (SAVE OUR SOCIETY) "describes any effort that contributes to making

the 1990s the first socially responsible Decency Decade...dedicated to the three critical Es: environment, education, and ethics."

* Faith Popcorn has been recommending marketing strategies for Fortune 500 companies for the past 15 years.
(The Popcorn Report, an Executive Book Summaries review) (McGinty 1271)

4. **Higher education must make a concerted effort to internationalize both credit and non-credit courses.** The number of international students enrolled in U.S. institutions of higher education reached a record number of 407,500 for the academic year 1990-91. "An Asian influx, mainly Chinese, accounts for 56% of the total." Also, there was a 42 percent increase in enrollments by students from Eastern Europe and Russia. Ranked seventy-fourth nationally, The University of Georgia tied the University of California, San Diego with 1,224 students. The State of Georgia was ranked twenty-first in the nation with 6,319 international students. Florida at number 5 and Virginia at number 15 were the only southeastern states to surpass Georgia. **(Chronicle of Higher Education) (Copas 1266 & Miller 1276)**

5. **With its access to faculty and mission of outreach, continuing education can provide a forum for discussion of many of society's most pressing concerns, including:** Health Care Issues. Canada and Western Europe spend 8-9 percent on health care whereas 12 percent of U.S. gross national product goes to health care. Yet, the number of Americans who have little to no health insurance is escalating and increasingly exposing the middle class to the same insecurity as the uninsured poor. "Contrary to what many people assume, the lessons of Canada, Germany, and other countries is not that costs can be controlled only by rationing beneficial care. The chief savings are to be found in a reconstruction of health insurance along administratively simpler lines and in the constraints on health care provider income that a unified system affords." **(Harper's) (Brewer 1291)** The Rich/Poor Gap. With the clear exception of New England, "Growing disparity between rich and poor afflicted every part of the United States in the 1980s.... America's haves gained, its have-nots lost, and its middlers generally stagnated.... Among U.S. families headed by working-age adults, the poorest fifth lost 12% of their real pre-tax income from 1979 to 1989.... "manufacturing wages peaked at $4.08 an hour in 1973....By 1988, the average wage stood at $10.18--worth $3.81 in 1973 dollars.... The 1980s demonstrated that the...cliche that 'a rising tide lifts all boats' is an illusion." **(Dollars and Sense) (Brewer 1297)** Child Poverty. Child poverty rates are twice as high as adult rates. One in five, or 12 million, of America's children are poor, including one in four preschoolers. Children are almost twice as likely as any other group, including the elderly, to be poor. During the 1980s, 2.2 million more children became poor. If this trend continues, we will have 14.8 million children living in poverty by the year 2000." Contrary to what most Americans believe, these children are **not** predominately born into female-headed black families on welfare in a central city nor is the teenage birth rate the culprit. Nearly two out of three poor families in 1989 contained at least one worker whose earnings, not public assistance programs, provided the largest source of income. **(Dollars and Sense) (Brewer 1293)**

6. **Possibilities for workplace/workforce continuing education include:** Women and Management Issues. The influx of women into the workforce continues. By the year 2000, look for one in two workers to be female. Employers have reaped loyalty and hard work with family-oriented initiatives, including flexible and part-time schedules, job sharing, and parental leave. On the other hand, a Department of Labor study concludes that a "glass ceiling" of subtle discrimination blocks many women's

chances for a position in top management. Today (the figure has remained steady for a decade), only three of every top 100 executive positions are held by women. Some are urging women to forego the male command-and-control style in favor of their natural management style, based on strong intuition and people skills. Female managers tend to share information and power and encourage employee participation. **(Naisbitt's Trend Letter & U.S. News and World Report) (Weeks 1236 & 1237)** Managing after Downsizing. Employees who survive business and organizational downsizing often become less productive, distrust management, become excessively cautious, and suffer low morale. The fear prevails: "If it happened once, it can happen again--next time to me!" Managers must know how to deal with the survivors "violated senses of security and justice." **(Training & Development) (Boland 1250)** Quality Improvement. In its 10th annual survey of employer-sponsored training in America, the need for quality improvement training jumped to first place and promises to be a dominant concern for years to come. Customer service training dropped to third place. In 1991, there were five percent more providers of customer service training and a drop of nearly one million in the number of employees receiving such training. **(Training) (Brooks 1278)** Employee References. Supervisors are walking a tightrope when they give an employee reference. Well intentioned efforts to warn prospective employers about troublesome employees often backfires in the form of a charges of defamation (injury to reputation or good name). An employee who feels wronged can claim libel which is written defamation or slander which is spoken defamation. Employers who refuse to give references may be asking for trouble in the form on the emerging theory of "negligent referral" which is the failure to disclose certain types of information. **(Nation's Business) (Simpson 1230)** Training for Mentally Handicapped Adults. A Broward County Florida program indicates that mentally handicapped adults respond well to experiences that simulate real work and in which handicapped students assist in the training. Students build skills by practicing various clerical and information processing tasks in a high-tech computerized office environment. They also receive instruction in what constitutes acceptable behavior in the work setting. Prospective places of employment are power and light and telephone companies in their data entry departments. **(Adult & Continuing Education Today) (Boland 1248)**

7. **Computer-assisted music instruction can open the world of music to any interested person.** A professor at the New England Conservatory of Music adapted a traditional music harmony course "for collaborative learning" using Macintosh computers. As the course unfolded, it became clear that "computers render the composition and performance of music accessible to greatly increased numbers of people, even those without extensive musical training. The availability and versatility of computers provides the means for changing a common attitude that has become entrenched in this century--that the activities of musicians lack relevance to society." **(Harvard Educational Review) (Brewer 1301)**

8. **The environment for programming for older adults has never been better.** By 2000, persons age 65 and over will approach 13 percent of the U.S. population. Older adults are becoming more educated; between 1970 and 1988 their median level of education rose from 8.7 to 12.1 percent. Many older adults have the leisure time and discretionary income to devote to educational activities. And, despite a prevailing image, they are not too frail to participate. Only about 1 percent of persons 65-74 live in nursing homes. An organization's mission and priorities should dictate the type and level of programming for older adults. **(Adult & Continuing Education Today) (J.Barrett 1246)** In 1990, Georgia's population was 6.5 million; 10 percent (654,270) were age 65 or older. "Those counties with the most marked increase in over-65 populations were in North Georgia. **(Atlanta Journal) (Lawson/Laney 1329)**

MONITOR

AN A-Z UPDATE OF SELECTED TRENDS & ISSUES INFLUENCING GEORGIA CENTER STRATEGIC PLANNING

Economy

Since the recession began, service industries have trimmed 300,000 jobs, a trend likely to continue to both downsize bloat and improve profitability. Service productivity in the 1980s was essentially flat; now it must be improved to raise profit margins. Slashing payrolls (in progress) is not the sole answer. Nor will a technology miracle be the way out. "...service businesses own over 85 percent of American's stock of installed information technology (which) has yet to translate into major productivity gains. Increasingly, strapped service companies turn to the likes of Kelly Services (offers temporary help) and Octel (offers telecommunications help) for bottom-line help. **(U.S. News & World Report) (Weeks 1234)**

This article challenges recent assertions that white-collar workers have taken the brunt of the recession. In fact, "There are 1.2 million fewer blue-collar jobs today than there were when the recession started in July 1990--a 3.8% decline. The number of desk jobs has fallen by 600,000 in the same period--a mere 0.8%." And, according to data released by the Federal Reserve Bank, "White-collar unemployment never went over 4.2%...while the blue-collar rate never went below 7%." **(Business Week) (Hardaway 1283)**

Economists speak out: The Administration is "doing poorly in...capital accumulation--funds available for investment are very low; in research and development, we've been cutting back--particularly in the civilian sector, where our competitiveness is at stake." (Brookings Institution) If we are to remain the world's leader, education must be improved to prepare tomorrow's worker for "the highly mechanized, computer-industrial age." (Council of Economic Advisors) "On an after-tax income basis, the U.S. is the most unequal of the 10 modern nations studied."(House Ways and Means Committee) **(Washington Spectator) (Brewer 1290)** A decade after the birth of Reaganomics, "the radical mix of deep tax cuts, big defense increases and shallower but significant domestic spending reductions," the economic review is mixed. "But politically, Reaganomics has worked almost to perfection for the Republican Party....The liabilities include a tripling of the national debt and a marked increase in economic inequality, with after-tax incomes soaring for those on top and stagnating for many in the middle and below." **(Washington Post National Weekly) (Brewer 1300)**

Are two Americas emerging, one peopled by "a privileged middle class and the wealthy," and the other peopled by "an underclass...of mostly blacks, Hispanics and poor whites?" The growing income-gap is explained, in part by "the increasing monetary value of cognitive skills" and the continuing devaluation of a high school diploma. "In 1980, for example, a male college graduate made about 30 percent more than a male high school graduate. By 1988, he made about 60 percent more....In coming years, the price for first-rate cognitive skills will skyrocket....Meanwhile, real wages for low-skill jobs will increase slowly if at all...." The danger in this income-gap is the "potential for producing something very like a caste society," at which point, "American conservatism is going to have to wrestle with its soul." It can follow the Latin American model ("preserve the mansions on the hills above the slums") or remain true to its American heritage ("self-government and limited government"). **(The Washington Spectator & Harper's) (Brewer 1292 & 1296)**

Most American companies are not poised to be successful in the 1990s global economy. They continue to behave and compete as they did five to fifteen years ago. First things first, they must (1) rethink business strategies and reprofile their customers, (2) rethink and redesign work process and information flow, and (3) initiate a comprehensive leadership development and employee training process. A "major regauging of mindset, skills, and knowledge" will produce managers who understand "the culture, history, politics, economics, and commerce of every customer and competitor." **(Training & Development) (Brooks 1277)** Results oriented continuing education offers solutions to problems, a definite bonus for businesses in recession or restructuring. For instance, offer a business "a contract to provide continuing education to accomplish certain results in the workplace rather than giving greater knowledge by itself." Of course, the problem-solving course is designed in partnership with the business. **(Adult & Continuing Education Today) (Campbell 1289)**

"Convention facilities in Anaheim, Atlanta, Las Vegas and New Orleans, to name a few, 'are expanding to meet their own demand,'" and the economic impact is considerable. The host city collects $142.10 per day for each typical meeting attendee and an additional $95.31 per day from the typical trade show attendee. For many second-tier and non-tourist cities, lacking "air service, hotel rooms and downtown amenities, trouble develops when convention centers are touted as the way to economic development." **(Trade Show Guide) (Campbell 1268)**

Crime

"The number of people incarcerated in the United States shot up over 250% between 1970 and 1990. In 1990, the United States kept over 750,000 men and women locked up, and the numbers grow daily. We are now the world's top jailer, surpassing the Soviet Union and South Africa." The imprisonment binge disproportionately affects "poorly educated, unskilled, jobless men of color in their 20s. Nearly one in four black males between 20 and 29 is in prison or jail, on probation, or on parole." Alternative sentencing programs are suggested as the most socially redeeming and cost-effective reform. **(Dollars and Sense) (Brewer 1294)**

Higher Education

There are 1,200 two-year institutions in the nation, serving 42 percent of the nation's college students (about 6 million). Enrollment at these schools grew about 18 percent from 1980 to 1989 compared with only a 7 percent growth at four-year schools. The greatest growth at two-year schools has been among part-time, older students (an increase of 27 percent during the 1980s). **(John Naisbitt's Trend Letter) (Simpson 1241)** Adult undergraduates have expectations that challenge the traditional thinking of higher education administrators but are part of the arsenal of continuing educators. Among other things, adult students seek a wide variety of course offerings at convenient times of the day and evening, off-campus instruction, distance instruction, child care assistance, and options for financial aid. **(Adult & Continuing Education Today) (Hardaway 1286)**

According to the Carnegie Foundation for the Advancement of Teaching, The University of Georgia is "ahead of the curve" among big research institutions that have committed to a re-emphasis of the teaching mission. President Knapp started the ball rolling in his 1990 state of the university address, declaring that UGA would lift the teaching mission without forsaking its research mission. In June 1991, 87 top faculty members and administrators met in the north Georgia mountains to debate what constitutes scholarship in the 1990s, beginning with Ernest Boyer's (Carnegie Foundation) definition which blends teaching, research, and service in a way that has "jarred academia nationwide." **(Macon Telegraph) (McGinty 1309)**

This article reports on a two-year study of new faculty as teachers at two campuses, one a comprehensive university and the other a doctoral university. "It shows a surprisingly slow pattern of establishing comfort and student approval, of moving beyond defensive strategies including overpreparation of lecture content, and of looking for supports in improving teaching." There was little to no structured efforts to assist new faculty in the area of teaching, rather there was a tendency "to let new faculty 'sink of swim' on their own, perhaps so that they can take full credit for their work." The article suggests that new faculty can benefit greatly from assistance that helps "them refrain from overpreparing facts" and that assists them in being comfortable in encouraging student participation. **(Journal of Higher Education) (McGinty 1311)**

This article, intended for public school teachers, bears a message for higher education. "Learning to teach against the grain" (title of article) is easier for teachers who "regard themselves as agents for change" and who are willing "to work in the company of experienced teachers who are themselves struggling to be reformers in their own classrooms, schools, and communities." **(Harvard Educational Review) (Brewer 1302)**

A College Board study found "... 45 percent of the nation's undergraduate and graduate enrollment is a least 25 years old. ...within 10 years these older students will constitute a campus majority." According to the Georgia Board of Regents, only 29.6 percent of first-time, full-time freshmen graduate within five years from the school they first enter. For the University of Georgia the rate is 44.6 percent. **(Atlanta Constitution) (McGinty 1310)**

The adult and continuing education teaching model hinges on involvement of students in the learning process. In the face of the information explosion and an older student population, teaching that is limited to transfer of content is inadequate. **(Adult & Continuing Education Today) (N.Williams 1254)**

Technology. "The U.S. Department of Education found Liberty University liable for providing 'excessive' federal student aid to students pursuing degrees through correspondence instruction involving mailed videotaped lectures. The Department contends that courses of study that do not provide for immediate interaction with faculty are to be classified as correspondence instruction." **(NUCEA Communication) (McGinty 1263)** A consortium of nine universities, including the University of Maryland, has announced the first bachelor's degree program delivered exclusively through cable television and satellite broadcasts. Students must have completed two years of college before enrolling. **(Newsletter of the American Independent Study Division & Naisbitt's Trend Letter) (Weeks 1228 & 1259)**

Regarding sexual harassment, "...the conflicting message of the Thomas confirmation hearings...left women on college and university campuses in turn encouraged and dismayed: encouraged by the public dialogue that had opened on a sensitive and relatively unexplored subject, and dismayed, they said, by the tactics used to discredit Ms. Hill." **(Chronicle of Higher Education) (McGinty 1313)** Apparently, "Oklahoma State Representative Leonard Sullivan, Republican of Oklahoma City, is seeking to have Prof. Anita Hill ousted from her tenured position." Mr. Sullivan believes that "'We must get left wing extremist influence off the campus before it spreads further. We can't afford to have a high profile professor on campus that millions of Americans, according to polls and national talk shows, believe is a fantasizing liar.'" **(E-mail Note, ANSAXNET Discussion Forum) (Miller 1275)** Although women are most often the victims of sexual harassment, "men can be victimized by aggressive women and some people face homosexual pressure in the workplace." Certainly, "Not all men use sex as a power tool, and not all women react with helpless resignation." Many women who are sexually harassed never file a complaint for fear of losing their job or, worse, not being believed by the in-house arbiters of complaints (usually men because they hold the power). "Professionals agree that the structure of the workplace plays a key role in women's reluctance to protest treatment they find offensive. The overriding question in those instances is, "Who do you tell?" **(Athens Daily News/Banner Herald) (Andrews 1305)**

"Sensing that their heyday may soon be behind them, and faced with tough competition for students and faculty members, the nation's business schools are turning increasingly to public relations to help shape their images." For one thing, how B-schools fare in various polls makes a big difference to their applicant pools. **(Chronicle of Higher Education) (Copas 1265)** A poll conducted by BUSINESS WEEK indicates companies are "disenchanted" by the caliber of recent MBA graduates and are opting instead to put employees into nondegree executive education programs. The top five providers are at Michigan, Virginia, Northwestern, Duke, and Stanford. Many companies "are forging partnerships to design customized programs in conjunction with schools eager to meet their needs." **(Business Week) (Washington 1306)**

Branch campuses are being touted as a means of alleviating crowded home campuses and of serving students who prefer to pursue their college education within commuting distance of home and work. The article discusses seven critical factors that must be addressed in establishing branch campuses. For instance, community expectations and institutional priorities must be balanced; academic and accreditation standards must be assured; and student services must be provided. **(Journal of Continuing Higher Education) (Conover 1273)**

A noncredit continuing education class in Dade County (Florida) resulted in the students suing the instructor. In the process of teaching the course on investment, the instructor solicited investments from the students for his company and then, according to the students, mismanaged their portfolios. **(Adult & Continuing Education Today) (McLaurin 1281)**

Cultural Diversity

For much of 1991, the Middle States Association of Colleges and Schools was in the news. When Middle States denied accreditation to an institution it said had failed to meet a diversity standard, a national debate erupted, followed by a delay on the part of the U.S. Department of Education in granting Middle States renewed recognition. In support of Middle States' position, the president of the American Council on Education (ACE) accused the Department of Education of acting in an "arbitrary, inconsistent, and illegal" manner. The Secretary of Education "questioned whether Middle States was attempting to enforce civil rights laws... the province of federal officials." Finally, in January 1992, the stalemate was broken when Middle States agreed that it would not deny an institution accreditation "solely for failing to meet a diversity standard." **(Higher Education & National Affairs) (Simpson 1240 & McGinty 1331)**

"A federal judge has struck down a university hate-speech code, ruling that is violates students' First Amendment rights. The decision called into question a number of efforts by colleges nationwide to penalize students who use racist, sexist, and homophobic slurs against others." **(Chronicle of Higher Education) (Copas 1267)**

Bitter divisions are breaking out between the nation's two largest minority groups, blacks and Hispanics. "Once solidly united in the fight for equality (they) have turned on each other in a fight for power....At the root of the quarrels is a seismic demographic change: early in the next century, Hispanics will outnumber African Americans for the first time." Major points of contention are immigration policies, politics, and jobs. According to a sociologist at Johns Hopkins, black and Hispanic leaders "see everything as a zero-sum game. If blacks get something, Latinos lose something, and vice versa." **(Time) (Weeks 1235)**

Public School Education/Reform

The critical teacher shortage, especially among minorities, has ignited Benedict College (Columbia, SC) to develop a program that taps older, retired military personnel to enter the teaching profession as a second career. The program recognizes that the military has a significant pool of black males who could become positive role models in the classroom. Coursework is offered weeknights and weekends for two years. Coca-Cola provided a $300,000 start-up grant for this project. **(Black Issues in Higher Education) (Washington 1307)** Alarms continue to sound regarding America's education system, often attached to statistics that show how far we've fallen behind the Japanese and Germans. Education appears to be "a servant of the GNP, a weapon in a global conflict.... The real values of education--to learn about the world, to appreciate the beauty of culture and to foster free thinking--have no place in the official rhetoric." It can even be argued that "Much of the Government and the U.S. business community may actually prefer their workers the way they are. Only 5 percent of U.S. businesses are trying to implement a competitiveness strategy based on making the best use of workers' skills and creativity." **(The Progressive) (Brewer 1298)** The Administration's America 2000 education plan aims, on the one hand, at improving the standards and performance of the country's existing 110,000 public schools and, on the other hand, suggests replacing them as quickly as possible with New Generation schools. These new schools will be developed initially in 500 communities with private funds; if these schools continue multiplying they will not be in addition to public schools but in replacement of them. This would be a radical change for the country and needs to be debated. **(Washington Post National Weekly Edition) (Brewer 1299)** This well researched article analyzes and critiques the special education system in the United States, focusing on policies, practices, and grounding assumptions. The author argues that our current bureaucratic organization of public schools over-values a specialized professional culture and, thus, cannot fulfill the social goals of educational excellence and equity. A structure the author calls "adhocracy" is offered as a better model because of the emphasis on collaboration and active problem solving. **(Harvard Educational Review) (Brewer 1303)**

Lifestyle/Values

Are Americans beginning to experience some distaste for the way they have been behaving for some years? A major cover story in **Time** carried these back-to-back articles: "A nation of finger pointers," "Crybabies: Eternal victims," and "Busybodies: New Puritans." The gist of the message is that "Twin malformations are cropping up in the American character: a nasty intolerance and a desire to blame everyone else for everything." This manifests itself in a nation of "busybodies" and "crybabies." In higher education, busybodiness is easiest to see in "political correctness," an intolerant specification of what should be said and done about all manner of things. The "self-tort crybaby" and the "all-purpose victim" have loosed a national deluge of frivolous protest and litigation. Corporate and academic attempts to regulate lifestyle outside of working hours is roundly rejected by the American people. So far, 19 states "have passed some form of legislation that bars employers from discriminating against workers because of their lifestyles." Bottom line: "Each approach, that of busybody or crybaby, is selfish, and each poisons the sense of common cause. The sheer stupidity of each seeps into public discourse and politics." **(Time) (Dowdle-Head/McGinty 1316)** This article is about "Recovery, co-dependency, and the art of blaming somebody else." The author is critical of the entire recovery movement; its "message...is that there are no civic, no social obligations, only private ones." Parents receive the most blame. In addition, "...recovery writers insist that nearly everyone in the United States has been a victim of some instance of child abuse...," of which the list is long. The author concludes that as adults we must take responsibility for ourselves and accept "there is no going back, no reprieve from adulthood, which is to say from consciousness." **(Harper's Magazine) (Dowdle-Head/McGinty 1314)**

Workplace

Going, going, nearly gone is the generation so aptly defined and described in the book, THE ORGANIZATION MAN. By the tens of thousands these men took a vow of loyalty to their organizations, lived in suburbia, and moved when the boss said move. (When the book came out in 1956, there were no "organization women".) A new book, THE NEW INDIVIDUALIST, based on interviews with 175 organization men from the original study and 125 of their children describes a radical shift. "Ten million of the Organization Men's 19 million...offspring already are in managerial or professional positions... Corporate loyalty no longer exists in this generation....The offspring are committed to what they do, to the profession and to their work, not to the company.... That difference between loyalty and commitment is a real and important distinction." The authors suggest that the failure of corporate America to rise to today's many challenges may relate to those CEOs who are the last of the organization men retaining too much faith in hierarchy and bureaucracy." **(USA Today) (McGinty 1238)**

While documenting the specific case of one IBM employee, Richard Rathemacher, this article explores ways in which companies may use early-retirement plans to "mask age discrimination." Early retirement packages "are legal as long as older workers leave voluntarily and the buyouts aren't part of a scheme to hire younger, cheaper labor." In Rathemacher's case, after excelling at IBM for many years (he won numerous sales and achievement awards), a new manager reorganized the branch, and put him in charge of mainframe computers. Since Rathemacher's entire experience had been with small computers, his manager was able to challenge his performance and suggest early retirement. **(Business Week) (Hardaway 1284)**

A Conference Board study of work/family programs indicates that those employers who have adopted family-supportive measures have benefitted. Child care programs encourage employees to stay with the company and also curtail absenteeism. Flextime arrangements have reduced absenteeism and tardiness. Programs to assist employees with drug abuse or other problems have improved employee performance. How family-friendly a workplace is will make a difference in an employer's ability to compete for a shrinking number of workers, "many of whom are female, foreign, or elderly." **(Training & Development) (Brooks 1279)**

Business is concerned about where future workers will come from and the fact that blacks, Hispanics, and women, "traditionally underutilized groups," will comprise a growing percentage of the labor pool. However, the immediate concern of most companies is improving the productivity of current workers. "Seventy-five percent of the people who will be working in the year 2000 are already on the job." The key lies in recruiting, retraining, and retaining high-quality people, "To insure a large pool of qualified recruits for the future, businesses and educational institutions...are concentrating on the 75% of high school students who do not plan to attend a four-year college....The most popular new alternative to a college-prep curriculum is Tech-Prep, or 2+2, so called because it is usually a two year program that prepares average-level high school students, who often perform below their abilities, for two years of community college." **(Fortune) (J.Barrett 1245)**

The number of "telecommuters" has grown 22 percent annually since 1988. "...by 1990 some 4,300,000 full-time company workers had managed to arrange work-at-home schedules, mostly for one to two days a week." Surprisingly, "only 46 percent of all telecommuters actually have a computer at home." And, defying the expectation of many, 51 percent of telecommuters are men. **(New Woman) (Hardaway 1285)**

The health care industry will be greatly affected by three demographic trends: "the aging of the population, the growing majority of women, and the nation's increasing ethnic heterogeneity." The feminization trend is apparent in that "59.4 percent of graduates of master's programs in health administration are women--a 50 percent increase since 1970." Also, projecting today's trends in women medical school graduates and medical school students, it is likely "that by the mid-21st century, the majority of U.S. physicians will be women." **(Hospitals) (Lawson 1272)**

According to the Tobacco Institute, the number of adult smokers in the U.S. has declined from 44 percent of the population in 1963 to 29 percent today. A random sampling survey of 833 employers discovered that 34 percent of the companies banned smoking altogether and 34 percent banned smoking in any open work area. The Labor Department's Occupational Safety and Health Administration (OSHA) is considering a ban on smoking as a part of a broader study on indoor air quality in the workplace. **(Atlanta Constitution) (Simpson 1257)**

Technology

Sen. Albert Gore is pushing Congress to support his bill, the High Performance Computing Act, which would fund research to insure the U.S. develops "an information superhighway," paved with glass fibers and silicon. The nation's telephone companies are laying fiberoptic cable as fast as they can and also researching ways to make existing copper wires carry more information. (Unfortunately, it would take at least $100 billion to connect every U.S. business and household to a fiberoptic network.) Japan plans to lay fiberoptic cables to all Japanese homes and offices by 2015. **(Business Week) (McGinty 1317)**

An IBM executive sees computer-integrated manufacturing (CIM) as a technology "leading us to nothing less than a second industrial revolution." CIM techniques "can increase productivity, improve product quality, lower production costs and cut product cycle time." Training for engineers and managers is provided by the 75 two- and four-year colleges and universities that belong to the CIM In Higher Education Alliance, a nationwide consortium sponsored by IBM. **(Adult & Continuing Education Today) (Boland 1249)**

Although expensive, the hardware and software exist to accomplish what this article calls the "Big Merge--an information system that can support all business functions, from marketing and sales to customer service and strategic planning." Even if money is no object, many companies cannot "get other departments outside of marketing to share their secrets with the whole company.... Before a company can do the Big Merge, its managers must perfect an ancient art form: open, honest communication." **(American Demographics) (N.Williams)**

Marketing/Public Relations

Hospitals have discovered that, more often than not, an institutional look turns off people who are already experiencing anxiety. Renovations and new construction strive for "interior environments that will attract and draw people, including workers." The preferred image is more residential than clinical. **(Building Operations & Maintenance) (Evans 1232)** NOTE: Of course, these same principles apply to the Georgia Center and other adult residential conference centers.

Any product, service, or program that would be of interest to college students should be marketed through the campus newspaper. Over 40 percent of college students read the campus newspaper regularly. Be sure to use language and images that click with today's new generation of college students. **(American Demographics) (N.Williams 1253)**

According to Gallup surveys, the consumer who is interested in the environment encompasses all age ranges. A high percentage of respondents were concerned that neither the American public nor industry is worried enough about environmental issues. In addition to providing programs on the environment, continuing educators should promote their unit's success in conservation, i.e., the use of recyclable paper for brochures.

In continuing education, there can never be enough attention to basic services and communications: Remember, "...only 5 percent of dissatisfied customers bother to complain. The others just don't come back." The key lies in listening to customer expectations and then meeting or surpassing those expectations through a trained and dedicated staff. In some cases, good service does not equate with human attention. To combat long lines, a New Jersey supermarket installed an automatic check-out machine which became its customers preferred way to check out purchases.

MONITOR

AN A-Z UPDATE OF SELECTED TRENDS & ISSUES INFLUENCING GEORGIA CENTER STRATEGIC PLANNING

(Naisbitt's Trend Letter) (Saylors 1231) Consider offering more options for registration, more convenience in time and place, a better guarantee, or a liberal refund policy. / The telephone remains a potent marketing tool if used properly. Answer within three rings, focus carefully on the caller's request or stated need, and never respond by saying "I (we) don't know." Instead, say you will find out and call back. / A caller inquiring about a class can be encouraged to register, using these tips: ask questions and let the caller ask questions; identify courses that may meet the caller's needs; identify any benefits of taking a course; and be sure to add the caller to the mailing list. / Approximately 35 percent of business mail never reaches the intended recipient. Address direct mail to an individual and not to an office or even a title. **(Adult & Continuing Education Today) (N.Williams 1256, McLaurin 1280) (Course Trends) (J.Barrett 1244, N.Williams 1252 & 1255)**

SCANNNING ACKNOWLEDGEMENTS

In the last of two rounds of environmental scanning analysis in 1991, the Evaluation Committee met on November 12 and the Strategic Planning Executive Committee (SPEC) on November 25. Thanks are in order for the following scanners who either submitted scanning finds, voted, served on an analysis committee, and/or provided library or HyperVote support.

Grover Andrews
Vivian Ashley
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Gene Craven
Susan Daniell
Bud Davis
Judith DeJoy
Rosie DiGeorgio
Margaret Dowdle-Head
Bill Evans
Frank Fabris
Linda Gilbert
Cathy Gleaton
David Hall
Beth Hardaway
Jerry Hargis
Hal Holtz
Amy Hooper
Bonnie Lawson
James McCay
Donna McGinty
Sylvia McLaurin
Martyn Miller
Helen Mills
Sylvia McLaurin
Dorothy Parker
Mike Pasquale
Cheryl Prichard
Brenda Rogers
Clate Sanders
Janice Saylors
Doris Scott
Jim Shehane
Ed Simpson
Mitch Skelton
Vickie Stout
Diane Tallman
Rex Totty
James Washington
Ed Weeks
Marketing Interns:
Julie Barrett
Lisa Boland
Naomi Williams

The 1991 environmental scanning roster included 65 staff members, excluding the marketing interns. As the above list indicates, a high percentage of staff supported the various scanning activities in November. The SPEC committee includes the director, associate directors, and department heads. All other scanners form the Evaluation Committee.

The marketing interns have participated in the last several rounds of scanning. They are an enthusiastic group and their input has been appreciated.

UPDATE:
What Difference Does Environmental Scanning Make?

Georgia economists are sending mixed signals as to whether the state is still in recession or on the way up and out. On the basis of optimistic assessments given to him by his staff, Governor Zell Miller has proposed an ambitious program he calls "Georgia Rebound." Among other things, more funds will go to public education and the University System, including a projected 3 percent raise for faculty and staff. As far as it goes, this is good news. However, even when it is clear that the recession is behind us, numerous scans from **The Chronicle of Higher Education** and local and Atlanta papers indicate that the 1990s will not bring higher education "the good times" of the 1980s. Under these circumstances, Georgia Center management continues to focus on program and organizational fine tuning and realignment. This leaves on hold a number of desirable initiatives established in the environmental scanning process, such as the need to fund more research and development in educational technology.

In the November discussion of the issues voted as top concerns for the future of the Georgia Center, the Strategic Planning Executive Committee (SPEC) made the following decisions:

> Expanding continuing education's client base. In view of the enormity of training and retraining America's workforce for the next century, continuing education must look beyond its traditional client base, the white middle-class. ● Initiatives are being developed to enroll more minorities in **Evening Classes**. ● UGA's **Black Faculty and Staff group** will be asked to assist the Georgia Center in increasing the number of qualified blacks in the employment pool. ● Consideration is being given to developing compact disc interactive (CDI) approaches to **adult literacy**. ● Interested Georgia Center staff will be encouraged to sign-up for appropriate UGA classes to improve basic literacy skills. ● Seek opportunities to train or retrain **displaced mid-level managers**.
>
> Leaders in public higher education face profound changes. Are these leaders "ill-prepared," as some assert, to meet the challenges that will come as the missions of teaching, research, and service are redefined? How can the Georgia Center help? ● A concerted effort will be made to enroll more UGA faculty in the next **National Leadership Institute**. ● More is being done to highlight the many dynamic ways the service mission can enhance UGA's **teaching and research** missions. ● A new **Georgia Center Quarterly** column will seek to educate faculty and others to continuing education's mission.
>
> Distance learning at UGA needs definition and focus. Possibilities for electronic delivery of education are expanding rapidly. The Georgia Center could begin immediate bookings of an electronic classroom, however, the current confusion on campus about whose's doing what, hampers effective decision-making. ● A Georgia Center committee will establish the crucial questions that must be answered before proceeding with an electronic classroom or other distance delivery initiatives.

Appendix C

Future Concerns

FUTURE CONCERNS
OF CARDINAL STRITCH COLLEGE

April 1992
Vol. 2, No. 3

Currently Cardinal Stritch College has 80 individuals actively scanning 129 different publications for the Environmental Scanning Committee. The growth and participation of the scanning effort has been reflective of the participative and professional nature of the College community. Thank you for your ongoing support of Cardinal Stritch College's strategic planning efforts and please continue your fine efforts in the future.

SCANNING SUMMARY
January 1992 to April 1992

THE ECONOMY

1. The soaring cost of employee benefits, combined with a bleak fiscal outlook, is prompting many colleges to reexamine and tighten their benefits packages. Most of the changes involve health-care benefits. Nationally, health-care costs continue to rise much faster than the rate of inflation, and colleges have not been immune. Some institutions report their costs for providing health benefits have jumped by as much as 20 to 30% annually. As a result of that trend and a broader fiscal crunch that has led to layoffs on some campuses, changes are being made in the benefits arena. More colleges are requiring employees to foot a larger share of the bill for health insurance. A growing number have been using early-retirement incentives as a tool to reduce their work force. (*Chronicle*, 1/29/92)

2. State colleges and universities, faced with huge budget cuts from recession-wracked states, are raising tuition, giving pink slips to professors and eliminating courses. Nineteen states--including Wisconsin--have cut allocations for colleges and universities this year, a report by the American Association of State Colleges and Universities shows. Many institutions are choosing to increase tuition, cap enrollment and cut programs, rather than trying to stretch diminishing funds. University of Wisconsin System campuses may be cutting back on summer school courses, trimming some research projects and leaving 127 jobs unfilled to carve $26.5 million from their budgets. Half the money saved would be plowed into selective pay raises for high-demand faculty, while the rest would go toward library and laboratory improvements. (*Milwaukee Journal*, 2/18/92, 2/3/92, and *Time* 2/3/92)

3. National average salary increases for 1991 were considerably lower across the board for all school district administrators and a higher percentage of administrators received no salary increase at all. These results are among the findings of *American School & University's* eighth annual Compensation Survey. Tough economic conditions, demanding local pressures, and increasing regulatory demands forced most institutions to cut back in all areas, including administrative pay and perquisites. (*American School & University*, Jan. 1992)

4. Mired in the recession, college and university endowments have recorded sluggish earnings for the second consecutive year. In the latest of its annual studies, the National Association of College and University Business Offices found that college endowments had earned an average of 7.2% in the year ending June 30, 1991, down from 9.7% in the year before. The first two years of the 1990s contrast sharply to the financial bonanza of the 1980s, when college funds earned an average of 13.4% per year from 1981 to 1990. (*Chronicle*, 2/12/92)

5. Citing small enrollments and undeveloped programs, Yale University is contemplating some drastic changes. Yale is running an $8-million deficit, the first in 11 years and is seeking concessions in contract negotiations with the union representing the 3,500 office workers at Yale. In addition, a staggering $1 billion worth of maintenance work needs to be done on campus facilities. Even without this repair bill, Yale must reduce its academic offerings or see its annual budget deficit reach $50 million by the end of the decade, says Provost Frank Turner. The thought of an 11% cut in Yale's faculty--a measure proposed by an in-house commission--is met with disbelief by many of the students

and professors. Among the constraints of the University are: financial aid to students is absorbing a rising share of operating budgets, competition to attract top-flight professors is likely to increase due to a shortage of Ph.D.s in the next 20 years, and like Yale, many institutions face backlog of repair work, known as "deferred maintenance." (*Christian Science Monitor*, 2/7/92)

6. Higher-education officials fear that an investigation by the Internal Revenue Service into scholarships awarded by Harvard University could be a sign of tougher federal enforcement of tax laws affecting students and the colleges they attend. The IRS requested information on all scholarships awarded in 1989 and Harvard officials indicated that information on about 3,500 students had been provided to the government. The IRS could use the information to determine whether students had reported scholarships that were subject to taxation and to check on whether Harvard had met its reporting requirements. If the IRS checks other institutions, as it is expected to do, it is likely to find many students who have not reported all taxable income. (*Chronicle*, 2/26/92)

7. Six months after the Education Department announced a plan to end the flow of student loans to institutions with high default rates, many of the non-profit colleges and technical schools that would be affected say they have evidence that the department is using faulty figures. Last July the government identified 178 colleges and for-profit trade schools that were in danger of losing their eligibility for the loan program because their former students had default rates in excess of 35% for three consecutive years. Department officials report that they have succeeded in stopping loans to 117 of the trade schools and to 9 non-profit colleges. Eleven non-profit colleges and 31 trade schools are still appealing their cases while the 10 trade schools have won the right to continue in the programs. Officials at seven California community colleges that are among the non-profits with appeals pending are optimistic they will avoid losing loan eligibility because the state agency that guarantees many of their loans has found errors in the calculation of default rates. (*Chronicle*, 1/22/92)

ENROLLMENT MANAGEMENT

8. In findings that present a brighter outlook for college enrollments than previous studies, the U.S. Department of Education estimates that the number of college students will climb from 14.1 million in 1991 to 16 million in 2002. The projected 13% increase is largely the result of rising college-enrollment rates and growth, beginning in 1996, of the 18- to 24-year old population. (*Chronicle*, 1/22/92)

9. Many colleges and universities report an upsurge in applications for admission in the fall 1992, despite a depressed economy and a decline in the number of people graduating from high school this year. Private colleges report increases of as much as 27% over last year, while some public colleges report increases of up to 10%. Not all of the increases may be as impressive as they may appear, however, since they follow a year in which some colleges--primarily private ones--saw their applications dip between 5 and 16%. In addition, despite the increases at many institutions, some public and private colleges are experiencing small declines in the number of students seeking admission for the fall. (*Chronicle*, 3/18/92)

10. As budget cuts take a slice out of academic programs at colleges and universities across the country, many students are being forced to delay their graduation plans or change their majors because they can not get the classes they need. Others are pleading with professors to let them into classes that already are overcrowded. Some students who are enrolled at large universities are traveling to community colleges to pick up courses that they could not get into on their own campuses. Others who can afford it are considering transferring to private institutions, where classes typically are smaller. Increasing the burden is the fact that for the first time in at least 33 years, state governments appropriated less money for higher education this year than last. According to a study by the Center for Higher Education at Illinois State University, states will provide nearly $40.1-billion for higher education in 1991-1992, about $80-million less than last year. Thirteen states had appropriated less for education this year than they did two years ago. Wisconsin increased its spending by 9% from 1990-1991 to 1991-1992. (*Chronicle*, 11/6/91, 12/1/91)

11. More than in the past, students now let their pocketbooks guide them when it comes to choosing a college, a wide-ranging survey of freshmen has found. The survey was conducted in summer 1991 by the Higher Education Research Institute at the University of California at Los Angeles. The results are based on responses from 210,000 students enrolled at colleges and universities. Twenty-seven percent of the students surveyed said they had selected their colleges because of low tuition. (In 1991, approximately 9% of the respondents from Stritch indicated low tuition was a very important reason

for selecting the college.) In 1990, 23% of the freshmen reported doing so. The proportion of students who said they had chosen a college based on offers of financial aid also increased--to 28%, up from 25% in 1990. (Forty-eight percent of Stritch respondents indicated the same.) In addition, more students said they had chosen their college or university because it was close enough that they could commute to the campus and save money. Twenty-one percent of the students questioned in 1991 said they had selected a college because it was near their home, compared with 20% in 1990. (25% of Stritch respondents indicated the same). (*Chronicle* 1/22/92)

12. Many colleges and universities that just a few years ago were housing three students in rooms meant for two and turning away those who wanted to live on the campus, now face a dearth of undergraduates interested in dormitory life. As a results, colleges are closing residence halls or offering incentives to lure students back to them. To attract students, colleges are reserving dorm wings for groups of undergraduates who share common interests, and are converting doubles into singles for students who want privacy. In some cases, colleges have turned to private developers, who use their own funds to construct the buildings on or near campuses. Arizona State is offering quiet floors, floors for students interested in public service, and rooms for commuter students who want a place to study. In addition, seniors who rent rooms receive a 10% rebate. (*Chronicle*, 9/25/91)

13. The University of Wisconsin-Platteville is shutting the door on new freshmen admission for the first time in the school's 126-year history. Applications for admission are more than 20% above the same period last year and because of UW System enrollment limits, UW-Platteville has to cut off new acceptances. (*Milwaukee Journal*, 2/5/92 and *Chronicle*, 1/22/92)

POLITICS AND THE LAW

14. In the last decade the number of disabled students on the nation's campuses has tripled; they now account for about 10.5% of all college students. With this increase has come a rise in disability-related litigation. Before 1990, the major legal mandate concerning campuses was Section 504 of the Rehabilitation Act of 1973, which prohibits recipients of federal money--virtually all colleges and universities--from discriminating on the basis of handicap. In 1990, the American with Disabilities Act became law, imposing some new requirements. Taken together these two laws state that once a student with a disability has been admitted, the institution must make reasonable accommodations such as allowing reduced course loads, extra time for exams, or the tape-recording of classes, as long as such activities do not fundamentally alter the program or create undue administrative or financial burden on the institution. In addition, they require architectural accessibility for disabled students. While not every single classroom need be accessible, the educational program as a whole should be. (*Chronicle*, 9/4/91, *EDUCOM*, summer 1991)

15. Though it makes good press, the impact of the Americans with Disabilities Act (ADA) taking effect in late January has not been worth the panic. Even though there are no monetary penalties for non-compliance, ADA has helped some people to look more closely at access problems. For years, state-funded schools and colleges were covered by Section 504 of the 1973 Federal Rehabilitation Act. The ADA covers buildings that were not under section 504. There are no ADA police and the system is complaint driven. With no punitive damages in the Act, there is no economic incentive, or penalty, for paying attention to the law. (*School and College*, March 1992)

16. Disabled students and faculty members say that federal regulations that have recently taken effect will provide a powerful new tool to compel colleges and universities to give the handicapped better access to campus computers and other technology. The vast majority of colleges are not up to speed in providing the kind of technology that allows handicapped people to participate fully in higher education, computer experts say. Many institutions are unclear about the changes they must make. Computer experts believe that although the new rules are not fundamentally different from those that have been on the books for nearly two decades, the publicity surrounding them will force many campuses to spend more time and money devising systems that suit the needs of handicapped people. (*Chronicle*, 2/19/92)

17. The Supreme Court is in the throngs of deciding on a college desegregation case that is expected to lead to a landmark decision defining the obligations of states to end past discrimination against Black students and historically Black colleges. The case before the Supreme Court is an appeal of a 1990 ruling by the U.S. Court of Appeals for the Fifth Circuit. The court, in finding that Mississippi's public colleges were desegregated, said state officials were "discontinuing prior discriminatory practices and adopting race-neutral policies and procedures." The Justice Department and civil-rights groups

appealed the decision, saying it conflicted with other federal-court rulings that required states to demonstrate that they had taken specific steps not only to remedy past discrimination, but also to promote equal opportunity in higher education. A ruling is expected soon. (*Chronicle*, 11/20/91)

18. A federal appeals court struck down a Blacks-only scholarship fund at the University of Maryland, a decision that calls into question the validity of race-based college scholarships nationwide. The Fourth Circuit Court of Appeals in Richmond, Va., ruled that college scholarships set aside to correct past discrimination at the institution still persists. The opinion opens that door to legal challenges in at least 19 states where universities have set up race-based scholarships as part of negotiated settlements with the U.S. Department of Education to end decades of past discrimination. (*Wall Street Journal*, 2/5/92)

19. A powerful member of Congress has introduced a bill that would provide as much as $275-million to build and renovate classroom and research facilities at colleges and universities. That provision is part of a much larger emergency measure aimed at relieving the economic recession. Rep. Jamie L. Whitten, the Mississippi Democrat who chairs the House Appropriations Committee, introduced the proposal which specifies that the money for facilities be awarded on a competitive basis. (*Chronicle*, 2/26/92)

20. The Senate, by a vote of 93 to 1, has approved legislation that would re-authorize the Higher Education Act for seven years. Senators backed the bill after its sponsors deleted an expensive measure that would have guaranteed Pell Grants to all who qualified. Senators from both parties praised the measure for increasing aid to middle-income families by expanding eligibility for Pell Grants and increasing the size of student loans. The legislation would authorize a maximum Pell Grant of $3,600 in the 1993-94 academic year, an increase of 50% over the $2,400 that will be provided for 1992-93. President Bush fully supports this bill. The full proposal would put $2-billion in new money into higher education, but shifts in funds and changes in eligibility requirements would eliminate more than 675,000 grants and 128,000 Perkins Student Loans.(*Chronicle*, 2/5/92, 3/4/92)

21. A federal privacy-protection law gives students the right to see comments written abut them by admissions officers, the Education Department has ruled. Until now, university officials have believed such comments were not covered by the law. The department acted after Harvard University denied a student's request to see the comments written about him. Frank Burtnett, executive director of the National Association of College Admission Counselors fears that the quality of admissions evaluations would go down because "you are going to see people being less candid." (*Chronicle*, 4/1/92)

22. An education-improvement program that Gov. Tommy G. Thompson and other sponsors say would keep closer watch on student achievement is drawing criticism in the state legislature. The $91 million program outlined to legislators during a meeting at the governor's mansion would give schools the authority to revoke teenagers' work permits if their part-time jobs interfere with class work. It offers financial incentives to encourage some school districts to save administrative expenses by consolidating and recommends development of portfolios to mark students' progress over the years. (*Milwaukee Journal*, 1/18/92)

ACCREDITATION

23. The Board of Trustees of the Middle States Association of Colleges and Schools voted recently that the organization's controversial "diversity standards" would not be a condition of institutional accreditation. Accrediting officials fear that a recent move by the Middle States Association of Colleges and Schools to back down from its use of "diversity standards" has given the Education Department too much power over accrediting associations. In Dec. 1991, Middle States adopted a policy stating that its diversity standards would not be used as a condition for accrediting institutions and that colleges could define for themselves how the standards would be applied. The standards allowed accreditation teams to evaluate colleges' records in recruiting and retaining minority students, faculty members, and governing board members. Middle States made the standards optional after months of wrangling with the Education Department. Education Secretary Lamar Alexander has said that the standards could lead colleges to use quotas and could impinge on academic freedom. The department's ability to force an accrediting body to change its standards is worrisome, say many accrediting officials, because two other regional accrediting bodies use diversity issues in accreditation and a third one is expected to start doing so in 1992. (*Chronicle*, 11/20/91, 12/18/91, 1/8/92)

24. Education Secretary Lamar Alexander has proposed an end to the policy of requiring colleges wishing to participate in federal student-aid programs to be accredited by regional agencies. In its stead

Alexander has proposed a new system under which most colleges would receive a "pass" to qualify automatically for the federal programs. He said his system would avoid forcing colleges to participate in accrediting groups that have policies that the colleges oppose. Specifically, the secretary cited a controversial policy of the Middle States Association of Colleges and Schools, under which accreditation-review teams examine colleges' records on recruiting minority students and faculty members. Alexander said his plan would encourage new accrediting associations to develop, and allow the Education Department to focus its resources "on the schools that are having the most difficulty providing a quality education." (*Chronicle*, 11/27/91)

25. A report issued by the Education Commission of the States notes that a growing number of states and colleges have programs to assess what students are learning, but there is little evidence that the programs are improving education. The report, "Assessing College Outcomes: What State Leaders Need to Know," states that today 81% of colleges report they have assessment activities, up from 55% in 1988. (*Chronicle*, 1/8/92)

26. A controversy over the direction and leadership of a clinical-psychology program on one campus has erupted into a firestorm of criticism of the group that accredits it and 275 other doctoral programs. Professors and students at the University of North Texas are angry that for years the accrediting arm of the American Psychological Association has continued to accredit a program that they say has been plagued with problems. The critics say the APA should have monitored the program more closely and responded to complaints. A visit by accreditors for a review of the program--their first in six years--was too little too late, the critics say. The uproar is the latest in a long string of criticism of the APA. Before this controversy, another group, the American Psychological Society, had planned to meet this April to discuss concerns about APA accreditation. The Council of Graduate Departments of Psychology has also been raising questions about the accrediting practices. While critics at North Texas complain that the APA has been lax in its oversight of the program, many on other campuses say that it has been so rigid, prescriptive, and overzealous in its enforcement of standards that it has cramped innovative efforts. (*Chronicle*, 1/8/92

GENERAL TRENDS

27. In the library of the future, faculty members and students will have access to all information from a "universal workstation" hooked up to an electronic network, says a new report released here by the Research Libraries Group. According to the report, "Preferred Futures for Libraries," creating the all-purpose workstation will require collaboration among librarians, faculty members, and computer-center staff members--groups that have not traditionally worked together. As the academic community grows in dependence upon electronic publications and electronic bibliographic access, the interests and areas of expertise of the faculty, competing center, and research library become increasingly intertwined. (*Chronicle*, 2/26/92)

28. Caught in the economic crunch or rising costs and dwindling budgets, libraries have been forced to make damaging cuts in collections and services. Several of the more severe examples include: Florida Atlantic University's libraries budget which dropped from $3.1-million to $1.3-million in just two years; the libraries at Stanford University, looking to save $3.1-million over the next few years, are considering laying off about 10% of their staff; the campus libraries at the University of Minnesota-Twin Cities, hoping to save money through restructuring, plan to close their natural-history branch--twenty-three jobs have been left unfilled; Yale University's Sterling Memorial Library needs tens of millions of dollars in repairs; and the Occidental College library, which received no increase in its budget this years, has about 25% of its 500,000-volume collection useless because of needed repairs or replacement. (*Chronicle*, 2/19/92)

29. In 1988 Congress passed the Family Support Act (FSA) which officially took effect in November 1991. The law requires states to place a rising percentage of their welfare recipients in work, training or education programs. But it gives states much discretion in designing those programs. And in a policy shift that carries great but untested hopes, many states are urging people to return to the classroom rather than seek immediate, low paying jobs. Reports from the Department of Health and Human Services bear out the emphasis on education. Nationwide, 4.5 million families were receiving welfare in March, and 510,000 or 11%, were said to be participating in a JOBS program. Of them, 33% were enrolled in a basic education course, 11% in a post-secondary school, and 16% were learning a technical skill. The hope is to educate welfare recipients so they attain a better job once they return to the workforce. (*New York Times*, n/d)

30. A committee of educators and government officials, in what it calls a turning point in the school-reform movement, has endorsed the establishment of national standards that would spell out what the country's school children need to know. The panel, in a report to Congress, the Education Department, and the governors involved in the national school-reform effort, says that a new panel of politicians, educators, and concerned citizens should be responsible for setting the standards. It also calls for national testing to keep track of whether students are meeting the standards. (*Chronicle*, 2/5/92)

31. A new book written by four scholars warns that future students will suffer if colleges and universities do not solve their economic problems. The book, *Economic Challenges in Higher Education*, analyzes problems concerning educators by explaining how higher education is affected by the nation's economy. It also proposes cures for ailing colleges. Among other ideas, it recommends that colleges hire more professors without Ph.D.s. (*Chronicle*, 1/22/92)

32. From the way courses are designed to the methods teachers use to bestow attention on students, America's public schools are badly shortchanging girls, furthering inequities that hinder the choices they make as adults, the American Association of University Women contends in a landmark report. The report pulls together two decades of research to provide the most comprehensive look to date at the biases girls face from pre-school through high school. Among its findings: teachers give girls significantly less attention than boys; while the "gender gap" in math is declining, girls still are not pursuing math-related careers in the same proportion as boys; curriculums often ignore females or reinforce stereotypes; and most standardized tests are biased against girls. (*Milwaukee Journal*, n/d)

33. Ohio University has taken the term multiculturalism to heart by developing a strong reputation among foreign students. A commitment to "international community, to education for interdependence" has been a part of the university's mission statement since just after World War II. With almost 1,350 international students from more than 100 countries--and more than 50 active programs with nations in Europe, Africa, Latin America, and Southeast and East Asia--Ohio prides itself on its global lineages. The international feel of this midwestern public institution--one that is located 75 miles from the nearest major airport--is striking. Foreign students account for almost 8% of Ohio's full-time student enrollment of 18,000 which is surprising considering that university officials say the institution does not actively recruit them. Ohio has managed to achieve its relatively high enrollment of international students, and its reputation in their homelands, largely as a result of word-of-mouth in strong alumni networks abroad, and campus-to-campus exchanges and other agreements. (*Chronicle*, 11/20/91)

AROUND THE STATE

34. Katharine Lyall, the newly selected president of the University of Wisconsin System, directed the University of Wisconsin campuses to begin a process of reallocating $26 million from their budgets during the next three years to meet top priorities. The move is in response to state budget constraints and an anticipated decrease in enrollments. The money would be refocused to seven critical areas identified by regents as essential to maintaining a quality education: improved computer access, library acquisitions, engineering technology, improved instructional materials, modern labs and equipment, program assessment, and competitive compensation for faculty and staff. Moreover, Lyall also has designs on reducing faculty positions system-wide, setting policies for faculty accountability, and streamlining the administration.(*Milwaukee Journal*, 9/18/91, 11/4/91)

35. Besieged by the case of Jeffrey Dahmer and the murders of five Marquette students over the last six years, Marquette University has embarked on a bold move to curb the violence. Instead of pouring more money into campus security, Father DiUlio, President of Marquette, forged ahead with his ambitious proposal called the "Marquette Plan." The new plan calls for the 127-year-old Jesuit university to play a leading role in combating some of the root causes of crime in Milwaukee. The university would work to stimulate economic growth, refurbish dilapidated housing, and offer a wide range of social services, including legal assistance, drug and alcohol counseling, and dropout-prevention programs. Zoning laws would be reassessed to encourage long-term residence by existing community members as well as by Marquette faculty and staff members. Marquette officials have asked the federal government for $4-million a year for the next five years to make the plan a reality and are ready to turn to private sources for funds if need be. Unfortunately, the school will have to achieve these goals with fewer employees. Declining enrollment has caused the elimination of about 75 jobs on campus. (*Chronicle*, 11/13/91, *Milwaukee Journal*, 10/24/91)

36. Blindsided by enrollment declines at a time the school expected increases, Carroll College officials face the daunting task of convincing prospective students that a school going through an arduous

austerity program can still get a good education. With the resignation of president Dan West, the job of balancing downsizing and diplomas went to acting administrator A. Paul Jones, a Carroll trustee and a 1955 graduate. For the 1991-1992 school year, West budgeted for undergraduate enrollment of 1,750 to 2,000 students. In reality, enrollment had peaked two years earlier at 1,495. At 1,285 undergraduates for the 1991-92 school year, enrollment is expected to bottom out at as low as 1,125 students by 1994, before struggling back up. The results have been ten percent cuts in department budgets, a freeze on most travel and postponed maintenance projects. In addition, various positions have been eliminated, including the vice president of student development and vice president of academic affairs. (*Business Journal*, 3/16/92)

DID YOU KNOW THAT

... of the 10 largest banks in the world, 7 are Japanese and the other 3 are French. Citicorp, the biggest in the U.S. ranks No. 21. In addition, the U.S. share of global economic output has dropped from 60% four decades ago to 26% today.

... the unemployment rate in Jan. 1992 for the United States was 6.2% for whites (up 12.7% from a year ago), 13.7% for blacks (up 13.2%), and 11.3% for Hispanics (up 20.2%).

... twenty to thirty million American adults are seriously lacking basic skills: they cannot read, write, calculate, solve problems, or communicate well enough to function effectively on the job or in everyday life.

... by the year 2000, one out of every three Americans will be non-white and minority; the majority of children in the nation will be non-white during the 21st century.

... according to a report by the Carnegie Foundation for the Advancement of Teaching, 35% of American children arrive at school unprepared to learn.

... when it comes to math and science skills, U.S. school children lag behind students in at least a dozen other countries, the Educational Testing Service reports.

... according to several studies summarized by the World Bank Research Project, private high schools outperform their public school counterparts on standardized mathematics or language tests.

... rising income and educational levels since World War II were accompanied by a drop in crime rates among whites, but not among blacks, a study by the University of New Mexico concludes.

... according to the *Chronicle of Higher Education* end-of-August almanac there are nearly 13,500,000 students attending over 3,500 institutions of higher learning. Of these institutions, the number of schools with enrollments in the 1,000 to 2,500 range almost double all other enrollment categories.

... financial aid to college students from all sources was up by 4% in academic 1990-1991, according to data compiled by the College Board.

... among members of the main religious denominations in the United States, Jews have the largest number of college graduates--47%--while Pentecostals have the fewest--7%. Catholics have 20% graduating from college.

... in 1990-91 approximately 5,500 individuals took at least one of the Pre-Professional Skills Tests (PPST) for teachers and the following demographics were noted: 75% were females, 90% reported a grade point average of 2.5 or higher, less than 4% were minority examinees, and approximately 75% were 25 years of age or less.

... more and more students will be forced to turn to community colleges as an alternative to four-year schools, a recent survey concludes. Currently, about half of all freshmen are entering two-year institutions.

... the Educational Testing Service is trying out a computer version of the Graduate Record Examination's general test. It plans to offer the new version by fall 1992 as an alternative to the traditional paper-and-pencil variety.

... thirty percent of U.S. college freshmen took at least one remedial course in fall 1989--most often in mathematics, writing, and reading--according to a survey by the Department of Education. But the percentage of institutions that offer remedial courses is down from 82% in 1982-1983 to 74% in 1989-1990.

... in Orlando, Florida, one middle school recently reported that its students came from households in which a total of 43 different languages were spoken.

... a report by the University of Wisconsin System states that 20% of last year's 24,095 freshmen needed remedial math work and 10% needed English help.

... the top concern of Wisconsin's small-business people, according to a recent poll taken during a statewide Governor's Conference, is that basic skills be required of high school students. The second most cited concern was reforming civil liability laws to discourage frivolous lawsuits.

... for the second straight year, the number of births has risen in Wisconsin and, also for the second straight year, 18- and 19-year-olds and births to unmarried women played a big part in that. Four of every 10 births are to unmarried women.

... more than 14% of Wisconsin's Black students drop out of high school, compared with 2% among white pupils, according to a state education report released by Gov. Tommy Thompson.

... Wisconsin is second to New York in the nation for alcohol use by teenagers. Sixty-three percent of the state's high school students who participated in a recent survey said they used alcohol, and 43% said they had five or more drinks on at least one occasion during the preceding 30 days.

... according to Gov. Tommy Thompson's "state education report," 52.2% of whites entering college in 1980 had earned a degree by 1990 while 17.7% of African-American students graduated during this same period. The report also indicated that 46.4% of Asian students finished in that time. Hispanics' rate was 24.7% and American Indians' was 21.7%. Whites made up 91.5% of UW System enrollment.

... the Metropolitan Milwaukee Association of Commerce will be awarding 118 graduates of Milwaukee Public Schools $180,000 in association scholarships to attend 11 local colleges and technical schools. Stritch is a participating member of this program.

... goals for the year 2000 released for the first time by Mayor John Norquist's administration include increasing the city's population to 634,000 from 628,088; decreasing the poverty rate to the 1980 level of 14%; adding 10,000 jobs; reducing crime and teenage pregnancy by 10%; keeping the property tax rate not greater than 120% of the metropolitan area average; and decreasing the school dropout rate by 10%.

... the University of Wisconsin-Milwaukee is in the midst of a building boom--three construction projects are now under way. Included in the projects are new buildings for the School of Architecture and Urban Planning, a Science addition to Lapham Hall, and the School of Business Administration.

... in 1990, new students at the University of Wisconsin-Madison were blocked from registering for a class 16,272 times while the figure dropped for fall 1991 to 2,722.

VOLUNTEERS NEEDED

The Environmental Scanning Committee (ESC) would like to include all members of Cardinal Stritch College in the scanning process. If you would like to be responsible for actively scanning any periodical or publication, please notify the Office of Planning and Enrollment Management, Ext. 475 or P.O. Box 96A.

Members of the Environmental Scanning Committee: Ms. Susmita Acharya, Dr. Marna Boyle, Ms. Paula Friedman, Ms. Deborah Hanks, J.D., Dr. Peter Jonas (editor of Future Concerns), Dr. Jim Kasum, Fr. William Kohler, Mr. David Oswald, Sr. Mary Ann Polasek, Dr. Alex Popovics (chairperson), Sr. Margaret Ruddy, Ms. Karen Walrath.

Appendix D

AERA SIG: Futures Research and Strategic Planning Interactive Newsletter

SIG: Futures Research and Strategic Planning

Interactive Newsletter

Fall, 1991

The American Educational Research Association's (AERA) Special Interest Group in Futures Research and Strategic Planning (SIG) is sponsoring this interactive newsletter to explore the potential impact of current trends and emerging issues on educational practice, research, and policy.

The anticipated benefits of this ongoing discussion are:

- Active communications among professionals across fields and disciplines interested in the future of education;
- Identification of important focus areas for the SIG's allocated sessions at AERA's annual meeting; and
- Generation of useful insights about issues management strategies.

How does it work? The newsletter's interactive approach is based on the successive questionnaire methodology of the Delphi Technique. Your responses to the questionnaires will be summarized in the next issue and used to develop the next questionnaire. The questionnaires will focus on:

- Formulating the issues;
- Examining the various options available to practitioners, researchers, and policymakers;
- Determining current expert opinion;
- Exploring and obtaining the reasons for disagreements;
- Evaluating the underlying reasons; and
- Reevaluating the options.

This newsletter contains the second questionnaire asking you to clarify, elaborate, or illustrate first round responses with examples, observations, and opinions.

Who can participate? Participation is free to all SIG members. SIG membership is $5.00 per year, AERA membership is not necessary.

Interested? To join the discussion, complete and return the enclosed, self-addressed, Questionnaire and Information Form. For more information about the Interactive Newsletter or the SIG contact:

Magdalena Rood, Ph.D.
Senior Evaluation Associate
Southwest Educational Development Laboratory
211 East Seventh Street
Austin, Texas 78701

Phone: (512) 476-6861
Fax: (512) 476-2286

ROUND 1 RESPONSES

Round 1 focused on the factors that may impact the future of educational research, practice, and policy in the United States. Apologies are due to the SIG's international members. As evidenced by Round 1 responses, educational trends and issues are of global concern.

TRENDS

Respondents were asked to describe three trends believed to be important to the future of educational practice, research, and policy.

Population Trends
Changing composition of U.S. population:
- Aging,
- Increasing minorities,
- Changing patterns of socio-economic status.

Increasing numbers of minorities with special needs.
Growing tension between "the races" (ethnic groups) as more "of color" immigrants arrive in the U.S..

School Population
Increasing numbers of children living in poverty will be attending school.
Increasingly, schools have to cope with socioeconomic problems in addition to educational deficiencies and unpreparedness to learn.
Increasing numbers of minority youth are graduating from high school, but fewer of them pursue a college education.

Business and Economic Trends
Global economy.
Continued privatization of various public services.
Continued decline in American productivity vís à vís Europe and Japan.

The Business of Education
The increasing cost of higher education puts it beyond the means of many families.
Decreasing ability to support public K-12 education through traditional sources.
More and more young people, dropouts as well as graduates, leave school inadequately prepared for advanced study and professional careers.

Political Trends
Shifting funding patterns from:
- federal to state to local,
- elderly to children.

Increased competition for declining state and federal resources.
Growing interest in collaboration among many groups on policy development.

The Politics of Education
Continued decline in public support for education.
Increased demands from public for "quality" education.
Weakening of local school board power.
The re-election of George Bush thus ensuring privatization of education.

Technological Trends
Increasing use of technology.
Replacement of workers with automation in all job sectors including education.

Educational Uses of Technology
Increased use of technology (computers, video disk, TV, etc.) to deliver instruction.
More computer networking to share findings and implications of research.

Education Trends
Instructional Methods and Curriculum
Increased access to learning resources outside the school.
Growing concern about the implications of the global economy, e.g., the plan for European universities to adopt common curriculum, policies, schedules.
Quality issues, including assessment methods, and articulation from high school to two-year colleges to four-year colleges.

The Philosophy of Education
A slow but steady move from logical positivistic methods to naturalistic ones.
Increasing influence of ecopolitical values in educational discourses-practices, e.g., criticism of anthropocentric humanism.
Increasing influence of postmodern/ post-structural/postanalytic orientations in educational discourses-practices will be evident in the deconstruction of power arrangements underlying dominant discourses-practices.
Increasing sophistication of feminist critique(s) of educational discourses-practices.

Marvin Cetron and Owen Davies Identify

Fifty World Trends*

Population

1. In the industrialized countries the "birth dearth" has cut growth almost to nothing, while in the developing world, the population bomb is still exploding.
2. The AIDS epidemic will slaughter millions of people worldwide, especially in Africa.
3. A host of new medical technologies will make life longer and more comfortable in the industrialized world. It will be many years before these advances spread to the developing countries.
4. As the West grows ever more concerned with physical culture and personal health, developing countries are adopting the unhealthy practices that wealthier nations are trying to cast off: smoking, high-fat diets, and sedentary lifestyles. To those emerging from poverty, these deadly luxuries are symbols of success.
5. Better nutrition and the "wellness" movement will raise life expectancies in the industrialized countries.

Food

6. Farmers will continue to harvest more food than the world really needs, but inefficient delivery systems will prevent it from reaching the hungry.
7. The size and number of farms are changing: giant agribusinesses reap vast profits while small, part-time "hobby" farms also survive. The family farm continues to disappear.
8. Science is increasing the world's supply of food through biotechnologies such as growth hormones, and genetic engineering.
9. Food supplies will become healthier and more wholesome, most nations will adopt higher and more uniform standards of hygiene and quality.
10. Water will be plentiful in most regions. Total use of water worldwide by 2000 will be less than half of the stable renewable supply. Yet some parched, populous areas will run short.

Energy

11. Despite all the calls to develop alternative sources of energy, oil will provide more of the world's power in 2000 than it did in 1990.
12. Oil prices are not likely to rise; instead by 2000 they will plummet to between $7 and $9 a barrel. A number of factors will undermine oil prices within the next 10 years (not the least of which is that OPEC is not very good at throttling back production to keep prices up when their market is glutted).
13. Growing competition from other energy sources will also help to hold down the price of oil, including natural gas; solar, geothermal, wind-generated, and wave-generated energy; and nuclear plants.

Environment

14. Air pollution and other atmospheric issues will dominate eco-policy discussions for years to come: Soot and other particulates have been found to be more dangerous than sulfur dioxide and other gaseous pollutants; burning fossil fuel will spew about 7 billion tons of carbon dioxide into the air each year by 2000; global warming will contribute to the spread of Africa's deserts; Brazil will need economic help to halt the irrevocable destruction of the rain forests; acid rain will appear whenever new power plants are built without emission-control equipment.
15. Disposal of humanity's trash is a growing problem, especially in developing nations. Within the next decade, most of the industrialized world will all but run out of convenient space in its landfills.

Science and Technology

16. High technological turnover rates are accelerating—all today's technological knowledge will represent only 1% of the knowledge that will by available in 2050.
17. Technology has come to dominate the economy and society in the developed world. Its central role can only grow.
18. The technology gap between developed and developing countries will continue to widen.
19. Nations will exchange scientific information more freely, but will continue to hold back technological data.
20. Research and development will play an ever-greater role in the world economy.

Communications

21. Communications and information are the lifeblood of a world economy. Thus, the world's communications networks will grow ever more rapidly in the next decade.
22. The growing power and versatility of computers will continue to change the way individuals, companies, and nations do their business.

Labor

23. The world's labor force will grow by only 1.5% per year during the 1990s — much slower than in recent decades, but fast enough to provide most countries with the workers they need. In contrast, the U.S. faces shortages of labor in general, and especially of low-wage-rate workers.
24. The shrinking supply of young workers in many countries means that the overall labor force is aging rapidly.
25. Unions will continue to lose their hold on labor.
26. People will change residences, jobs, and even occupations more frequently, especially in industrialized countries.
27. The wave of new entrepreneurs that appeared in the U.S. during the 1970s and 1980s is just the leading edge of a much broader worldwide trend.
28. More women will continue to enter the labor force.

Industry

29. Multinational and international corporations will continue to grow, and many new ones will appear.
30. Demands will grow for industries to increase their social responsibility.

31. The 1990s will be the decade of microsegmentation, as more and more highly specialized businesses and entrepreneurs search for narrower niches.

Education and Training

32. Literacy will become a fundamental goal in developing societies, and the developed world will take steps to guard against backsliding toward illiteracy. Throughout the world, education (especially primary school for literacy) remains a major goal for development as well as a means for meeting goals for health, higher labor productivity, stronger economic growth, and social integration. Countries with a high proportion of illiterates will not be able to cope with modern technology or use advanced agricultural techniques.
33. Educational *perestroika* is changing American schools. In the long run, this will repair the nation's competitive position in the world economy.
34. Higher education is changing as quickly as primary and secondary schools.

World Economy

35. The world economy will grow at a rapid rate for the foreseeable future, but the gap between rich and poor countries will widen.
36. The world economy will become increasingly integrated.
37. The world is quickly dividing itself into three major blocs: the European Community, the North American free-trade zone, and Japan's informal but very real Pacific development area. Other regions will ally themselves with these giants: Eastern Europe with the E.C., Mexico with the U.S. and Canada. The nations of Latin America will slowly build ties with their neighbors to the North. The Australia-New Zealand bloc is still trying to make up its mind which of these units to join — the Pacific Rim, where its nearest markets are, or Europe and North America, where its emotional bonds are strongest.
38. The European Community will become a major player in the world economy.
39. The 25 most-industrialized countries will devote between 2% and 3% of their Gross Domestic Products (GDP) to help their poorer neighbors.
40. Western bankers will at last accept the obvious truth: Many Third World debtors have no hope of ever paying back overdue loans. Creditors will thus forgive one-third of these debts. This will save some of the developing nations from bankruptcy and probable dictatorship.
41. Developing nations once nationalized plants and industries when they became desperate to pay their debts. In the future, the World Bank and the IMF will refuse to lend to nations that take this easy way out. (Debtors, such as Peru, are eager to make amends to these organizations.) Instead, indebted nations will promote private industry in the hope of raising needed income.
42. Washington, D.C., will supplant New York as the world financial capital. The stock exchanges and other financial institutions, especially those involved in international transactions, will move south to be near Congress, the World Bank, and key regulatory bodies.

Warfare

43. The world has been made "safer" for local or regional conflicts. During the Cold War, the superpowers could restrain their aggressive junior allies from attacking their neighbors. With the nuclear threat effectively gone, would-be antagonists feel less inhibited. Iraqi President Saddam Hussein was only the first of many small despots who will try to win by conquest what cannot be achieved by negotiation. Terrorist states will continue to harbor chemical and biological weapons until the international community finally takes a firm stand.
44. Brushfire wars will grow more frequent and bloody. Among the most likely are: Israel vs. the Arab countries (Israel will win); India vs. Pakistan, and; Northern Ireland vs. itself.
45. Tactical alliances formed by common interests to meet immediate needs will replace long-term commitments among nations, "the enemy of your enemy is your friend."

International Alignments

46. The Information Revolution has enabled many people formerly insulated from outside influences to compare their lives with those of people in other countries. This knowledge has often raised their expectations, and citizens in many undeveloped and repressed lands have begun to demand change. This trend can only spread as world telecommunications networks become ever more tightly linked.
47. Politically, the world's most important trend is for nations to form loose confederations, either by breaking up the most-centralized nations along ethnic and religious lines or by uniting independent countries in international alliances. Yugoslavia will break up along religious lines; Quebec will secede from Canada probably in 1996, the four eastern Canadian provinces will be absorbed into the U.S. by 2004, and the other Canadian provinces will follow suit by 2010; Hong Kong and Macao will rejoin China, Taiwan will seek to join Mainland China shortly thereafter, the two Koreas will re-unite before 2000.
48. The role of major international organizations (i.e., the United Nations, the World Court, UNESCO, the World Health Organization, The Food and Agriculture Organization, the International Money Fund, the World Bank, and The Conference on Security and Cooperation in Europe) will become extremely important in the new world order.
49. International bodies will take over much of the peacekeeping role now being abandoned by the superpowers.
50. The field of public diplomacy will grow, spurred by advances in communication and by the increased importance and power of international organizations.

Source

Cetron, Marvin & Davies, Owen, *Trends shaping the world*, The Futurist (September-October 1991), 25 (5), pp. 11 - 21.

SIG: FUTURES RESEARCH AND STRATEGIC PLANNING INTERACTIVE NEWSLETTER

ROUND 2 QUESTIONNAIRE

In this questionnaire you are asked to think about the impact of the trends, issues, and events given in Round 1. Use additional sheets of paper if you need more space. Please print legibly or type your responses.

1. Please select three Trends from the Round 1 Responses to clarify, elaborate, or illustrate with examples, observations, and opions.

Trend 1: ____________________

Trend 2: ____________________

Trend 3: ____________________

2. Please select three Issues/Events from the Round 1 Responses to clarify, elaborate, or illustrate with examples, observations, and opions.

Event/Issue 1: ____________________

Event/Issue 2: ____________________

Event/Issue 3: ____________________

☐ I am a first time participant ☐ I participated in Round 1

Name: ____

☐ I am a SIG member ☐ I am joining the SIG and have enclosed my $5 dues.

Address: *(optional if you are a SIG member)* ______________________________

____

____

Telephone: ________________ Fax: ________________ E-Mail: ________________

Special Interest Area: ____

____

Please use the space below for additional comments:

Magdalena Rood, Ph.D.
Office of Internal Assessment and Evaluation
Southwest Educational Development Laboratory
211 E. Seventh Street
Austin, Texas 78701

ISSUES and EVENTS

Respondents were asked to list three issues or events that they believe (1) are highly likely to occur during this decade (1990-2000), and (2) will have a significant impact on educational practice, research, and policy.

Population

- Racial-cultural pluralism.
- A second wave of protesting by "have-not" African Americans, more violent than before because it will happen without the support of white liberals.

School Population

- Major gang wars on high school campuses.
- Middle-class African Americans return to the "South," consequently schools in the "North" and the "West" will become "Third World."

Business and Economics

- There will be a recession (state-specific and nationwide).

The Business of Education

- Schools will compete for dollars based on student performance on standardized tests.
- A major urban city school system contracts with a private corporation (i.e., IBM) to administer their school system.
- Private industry will be granted the authority to manage a number of large-city school (K-12) systems.
- Number of adults (over 18) enrolled in public educational agencies surpasses number of school-aged children.
- Need to create alternative funding sources or strategies for K-12 education, e.g., private/corporate sources and vouchers.
- As privatization of schooling continues public schools will become for only "have nots" like the charity wards of hospitals.
- Need to meet life-long learning needs for adults, including people who are making mid-life career changes.

Politics

- Major scandal discredits the Republican party and its leaders.

The Politics of Education

- Election of a Democratic president having a strong commitment to educational reform.
- All school districts required to provide education for 3 & 4 year olds if parents want to enroll them.
- Public disillusionment with public education.
- Lack of leadership for change among education professionals.

Technology

- Major breakthrough in computing technology.
- Information transfer technology.
- Inexpensive, high quality voice recognition systems.
- Continuing technological changes impacting the way of doing business for all sectors — education, manufacturing, services, etc.

Technology in Education

- Computerized classrooms with teachers trained in computer science and instructional management.
- National satellite for education.
- National education telecommunications system.
- State education departments delivering many instructional programs via distance learning TV arrangements.
- Info-tech challenges to individualism in education.

Education

- Super teachers with high salaries supervising others to improve student achievement.
- A number of major research universities will eliminate academic programs of marginal importance to their missions.
- Need to focus on redefining education pipeline relationships — pre-K, K-12, two year colleges, 4 year colleges, and beyond.
- Need to focus on defining mission of higher education in general, and of individual colleges and universities — driven by economic/funding issues as well as by conceptual issues.

The Philosophy of Education

- Further polarization of contested paradigms, e.g., quantitative vs. qualitative; argumentative vs. narrative, etc.
- Debate intensified concerning the industrial metaphors for education, e.g., corporate management style in schooling.

SIG: Futures Research and Strategic Planning

Interactive Newsletter

Winter 1992

SIG: Futures Research and Strategic Planning *Interactive Newsletter* is a forum for exploring the potential impact of current trends and emerging issues on educational practice, research, and policy. Using the successive questionnaire methodology of the Delphi Technique to guide our discussion, each issue of the *Interactive Newsletter* summarizes participants' comments and frames the next round.

This issue summarizes participants' responses to the Round 2 questionnaire (Fall 91). The focus of the second round was on clarification, elaboration, or illustrations of trends, issues, and events generated during the first round. Round 1 focused on descriptions of trends, issues, and events participants believed to be important to the future of educational practice, research, and policy. The trend summaries in this issue were modeled on the format of *A Workbook: University Strategies for the 21st Century*, by MGT of America, Inc. (August, 1991).

To participate in Round 3, complete the enclosed questionnaire form, or use your own paper, and mail it to Magdalena Rood, Ph.D., SEDL, 211 E. Seventh Street, Austin, Texas, 78701. Or fax your response to me at (512) 476-2286.

ROUND 2 RESPONSES

TRENDS

Round 2 responses clarified the trends listed during the first round. In analyzing participants' descriptions the trends seemed to cluster around four key trends. These are listed below with the related trends .

Key trend:

Growing numbers of school-aged children come from non-traditional homes and communities.

Related Trends:

- The rate of immigration from Mexico and other Latin American countries will continue to grow. Impacts on southern New Mexico:
  - A growing proportion of the population does not speak English;
  - More families are in need of health care and social services;
  - Higher rates of illiteracy (in any language) among adult population; and
  - Increasing rates of abuse and crime.
- Increasing numbers of children live in poverty and/or dysfunctional families. The impacts experienced in schools include:
  - Increasing incidence of attention-deficit syndrome and other conditions brought about by mothers' addictions during pregnancy;
  - Growing numbers of children live in poverty, and increasingly their families are homeless (but working); and
  - More children are in need of basic preventative health care, such as inoculations.
- Increasing youth violence in the community and in the schools.

Required Educational Response:

- Increasing numbers of students with special needs will change the way we teach, and what we teach. In-service and pre-service teacher-training programs need to be strengthened and improved.

Key Trend:

Educational theory and practice is shifting from teachers as " dispensers of knowledge" to "facilitators of learning."

Related Trends:

- Instruction across the curriculum developed by state departments of education, universities, and the private sector, will become increasingly available and accessible through distance learning technology.
- Continued "Infor-mating" of the workplace increases the importance of students learning to gather, manipulate, and organize information.

Required Educational Response :

- Stronger partnerships among schools, parents, and businesses to promote easier access to technological resources and computers.
- Improved teacher access and training in the use of technology for their own and their students' purposes.
- Increased access to information sources such as national and international databases and content area experts such as scientists, lawyers, politicians, manufacturers, etc.

Key Trend:

The economic and industrial characteristics of most states (and countries) are changing dramatically, causing expectations for school management and educational outcomes to change likewise.

Related Trends:

- Public support for education will be predicated on stakeholder involvement in setting exit criteria for the high school graduates. Business representatives, students, teachers, administrators and parents will be directly involved in identifying outcomes and standards.
- Increasing number of states are moving toward outcomes-based accreditation and more stringent diploma requirements. Similarly many state institutions of higher education are raising entrance requirements;
- To promote their interests in educational outcomes, business involvement in education continues to grow in the form of partnerships, managing their own schools, and instructional material development;
- Privatization of public schools will occur more frequently;
- Following the corporate restructuring trends, site-based management of schools will become the modus operandi, and each school will have its own school board;

Key Trend:

Shifts in public spending priorities.

Related Trends:

- As the gap between the rich and the other segments of the population grows, more people will need public services. As these services become overwhelmed, more governments (local, state, federal) will frequently be unable to provide them to all qualified applicants.
- Schools are experiencing a decline of public support
- Schools and colleges increasingly re-examine their programs increased competition for state and federal resources forces cuts and influences priorities.

ISSUES AND EVENTS

Educational Issues and Events:

- To address public concern about the teaching profession, school districts will employ well-paid "Super Teachers," who will be responsible for mentoring (supervising) other teachers and for augmenting university training programs.
- A new strategic alliance between education and private sector will form in the mid- to late-1990s, driven by startling new definitions of human competence and marketable skills.
- Not only will standardized tests diminish in importance as performance-based outcome measures gain credence, this shift will change focus from test content to curriculum content.

SIG: FUTURES RESEARCH AND STRATEGIC PLANNING
INTERACTIVE NEWSLETTER

ROUND 3 QUESTIONNAIRE

In this questionnaire you are asked to think about the options available to practitioners, researchers, and policymakers in regard to the **Key Trends** and the **Issues and Events** described in the Winter 1992 issue. Question 1, below, focuses on the responses possible at the national, state (province), and local levels to these **Key Trends**. Question 2, on the back, focuses on your primary affiliation's responses to the **Issues and Events**.

Use of this form is not required. But please follow its format if you'd prefer to use your own paper. If you use this form, please use additional sheets of paper if you need more room. PLEASE PRINT LEGIBLY OR TYPE YOUR RESPONSES.

1. Please select one Key Trend from the Round 2 Responses, and describe your thoughts on the potentially necessary practice, research, and/or policy responses at the national, state (province), and local levels.

KEY TREND: ____

Our national government and education agencies should respond with the following initiatives:

Practice:

Research:

Policy:

Our state government and education agencies should respond with the following initiatives:

Practice:

Research:

Policy:

Our local educational agencies and school system(s) should respond with the following initiatives:

Practice:

Research:

Policy:

2. Please select one or more Issues and Events from the Round 2 Responses, and describe your thoughts on the potentially necessary practice, research, and /or policy responses for your primary affiliation.

My Primary Affiliation: ______________________________

ISSUE/EVENT: ______________________________
Likelihood of impacting us within 5 years: ___ Very Likely ___ Likely ___ Not Within 5 Years

Practice(s) or program(s) we'll need:

Research information we'll need:

Policies we'll need:

ISSUE/EVENT: ______________________________
Likelihood of impacting us within 5 years: ___ Very Likely ___ Likely ___ Not Within 5 Years

Practice(s) or program(s) we'll need:

Research information we'll need:

Policies we'll need:

ISSUE/EVENT: ______________________________
Likelihood of impacting us within 5 years: ___ Very Likely ___ Likely ___ Not Within 5 Years

Practice(s) or program(s) we'll need:

Research information we'll need:

Policies we'll need:

Participant Name: ______________________________
Comments: ______________________________
____

Complete the following only if you have not participated before AND you are not a SIG member (Please enclose $5 for your one year subscription), OR your address has changed.
Address: ______________________________
____
Telephone: ____________ Fax: ____________ E-Mail: ____________
Special Interests: ______________________________

Return to
Magdalena Rood, Ph.D., SEDL, 211 E. 7th Street, Austin, Texas 78701
Or fax it to (512) 476-2286.

- Life-long learning entitlements will encourage mid-career and other learners to "drop in and out" as needed.

- Performance evaluation in colleges and universities is coming, and preparation for this event is something "we" are short on.

Socio-Demographic Issues and Events

- Gang and racially motivated violence will become the rule as polarization among diverse cultures and ethnicities increases. While one participant pleads "Let's stop this event before it happens," another predicts that the next decade will see race wars more vicious that those of the 1960s and perhaps a revolution.

- One participant warns that gang wars will soon invade high school campuses, another reports that gang violence has increased both on and off school campuses. Schools and communities need to develop cooperative strategies to deal with gangs, generate alternatives to gangs, and increase preventive activities.

- Major gang wars on high school campuses will force a gestapo mentality, and a different curriculum, on inner city schools.

Business and Economics Issues and Events

- The nation will enter an economic "white-water" as the recession deepens, the infrastructure collapses, and federal functions (among which bank insurance and social security funds) run out of money.

- Soon companies will establish their own school systems to compete with public schools for the "profits from education," such as those possible with voucher systems.

- Private industry's management of large urban schools will demonstrate superior performance on national tests and assessments.

- States will have to increase their share of funding for local school districts. Local districts will also systematically seek funding beyond local property tax (private foundation, etc.) because of property tax revolt.

Political Issues and Events

- There will not be a Democratic president before 1998. Probably not before the turn of the century. The party still has no distinguishable platform or stable national constituency.

- Public disillusionment, and a growing impatience with the slow pace of educational reform, spurs the search for "quick" (5-10 year) fixes, but may destroy the schools and create havoc in the U.S.

- School extend their purview by offering educational programs for developmentally disabled 3 and 4 year-old children, early childhood programs for birth-to-3-years, and pre-school programs for 4-year olds.

Technology Issues and Events

- As information transfer technology becomes a necessity in facilitating learning, questions related to identifying and financing networking requirements will need answering and exploring

SIG: Futures Research and Strategic Planning
Interactive Newsletter
ROUND 2 PARTICIPANTS

Charles F. Adams
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